

SDP2017-00575

AS-BUILT NO. 17-0300

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



TREE RETENTION CALCULATION

EXISTING ONSITE TREES:	267
TREES LOCATED IN CRITICAL AREAS & BUFFERS:	(0)
NON-VIABLE TREE:	76
SIGNIFICANT TREES FOR RET. CALC.:	191
REQUIRED TREE RETENTION RATE:	35%
REQUIRED NO. OF TREES TO BE RETAINED:	66.85
PROVIDED NO. OF TREES TO BE RETAINED:	62
• SIGNIFICANT RETAINED TREES:	44
• HERITAGE RETAINED TREES:	15
• LANDMARK RETAINED TREES:	3
TOTAL TREE CREDITS WITH INCENTIVES:	76.25
• SIGNIFICANT TREE CREDITS:	44
• HERITAGE TREE CREDITS:	26.25
• LANDMARK TREE CREDITS:	6
PROVIDED TREE RETENTION RATE WITH INCENTIVES:	39.9%

DIAPHRANE OF "RETAINED" TREE VIALBE FOR RETENTION (62)

DIAPHRANE OF "RETAINED" OFFSITE TREE

NON-VIALBE TREE

TREE TO BE REMOVED

TREE REPLACEMENT CALCULATION

ANY SIGNIFICANT TREE LAWFULLY REMOVED PURSUANT TO SMC 21A.37.240, TREE REMOVAL STANDARDS OR SMC 21A.37.350, TREE RETENTION STANDARDS, SHALL BE SUBJECT TO THE REPLACEMENT STANDARDS IN 21A.37.280.

129 TREES SHALL BE REPLACED AT VARYING RATIOS BASED UPON SIZE PURSUANT TO SMC 21A.37.280 - 229 REPLACEMENT TREES ARE REQUIRED (210 CONIFEROUS, 19 DECIDUOUS).

CONIFEROUS REPLACEMENT CALCULATIONS

34 LANDMARK TREES REMOVED AND REPLACED AT 3:1=102
28 HERITAGE TREES REMOVED AND REPLACED AT 2:1=56
52 SIGNIFICANT TREES REMOVED AND REPLACED AT 1:1=52
114 TOTAL TREES REMOVED AND REPLACED WITH 210 TREES

DECIDUOUS REPLACEMENT CALCULATIONS

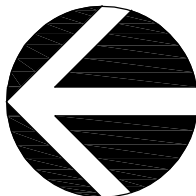
0 LANDMARK TREES REMOVED AND REPLACED AT 3:1=0
4 HERITAGE TREES REMOVED AND REPLACED AT 2:1=8
11 SIGNIFICANT TREES REMOVED AND REPLACED AT 1:1=11
15 TOTAL TREES REMOVED AND REPLACED WITH 19 TREES

SEE LANDSCAPE PLANS FOR PLANTING AND DETAILS

TREE PROTECTION REQUIREMENTS:

TREE PROTECTION FENCING SHALL BE PLACED AROUND ALL RETAINED TREES PER DETAIL ON SHEET 09. ARBORIST TO APPROVE TREE PROTECTION FENCING LOCATION PRIOR TO CONSTRUCTION.

THESE PLANS ARE RECORD DRAWINGS AND THE INFORMATION SHOWN ACCURATELY REFLECTS EXISTING FIELD CONDITIONS AS OF 11/06/19.



NORTH

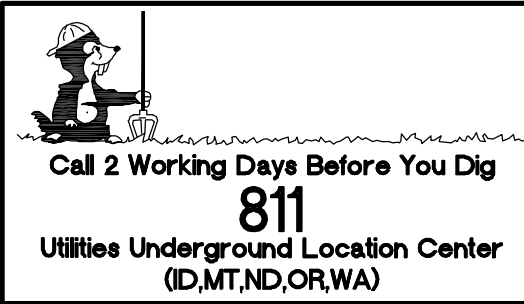
GRAPHIC SCALE

0 25 50 100

1 INCH = 50 FT.

AS-BUILT

NO AS-BUILT INFORMATION ON THIS SHEET.



SUBDIVISION

City of Sammamish Approval
Examined and Approved per SMC 20.05
for SDP2017-00575
this ____ day of _____, 20____.

City Planner

Public Works Development Review Engineer

LANDMARK AND HERITAGE TREE INCENTIVE TABLE

TREE NO.	SPECIES	DBH	TREE CREDIT	SMC SECTION	NOTE
244	DOUGLAS FIR	24	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
250	DOUGLAS FIR	24	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
257	DOUGLAS FIR	34	2	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
258	DOUGLAS FIR	34	2	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
259	DOUGLAS FIR	29	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
262	DOUGLAS FIR	23	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
272	DOUGLAS FIR	22	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
286	DOUGLAS FIR	29.5	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
343	BIGLEAF MAPLE	24	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
344	DOUGLAS FIR	42	2	21A.37.270(1)(C)	ONSITE/OFFSITE CONTINUOUS CANOPY
345	DOUGLAS FIR	28	1.75	21A.37.270(1)(C)	ONSITE/OFFSITE CONTINUOUS CANOPY
346	DOUGLAS FIR	29	1.75	21A.37.270(1)(C)	ONSITE/OFFSITE CONTINUOUS CANOPY
348	DOUGLAS FIR	27	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
351	DOUGLAS FIR	28	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
362	DOUGLAS FIR	28	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
363	DOUGLAS FIR	28	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
366	DOUGLAS FIR	29	1.75	21A.37.270(1)(C)	ONSITE/OFFSITE CONTINUOUS CANOPY
382	WESTERN RED CEDAR	30	1.75	21A.37.270(1)(B)	TREE RETENTION TRACT CONTINUOUS CANOPY
TOTAL LANDMARK AND HERITAGE CREDITS			32.25		
ADDITIONAL SIGNIFICANT TREE CREDITS			44		
TOTAL TREE CREDITS			76.25		



D.R. STRONG
CONSULTING ENGINEERS

ENGINEERS PLANNERS SURVEYORS

820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

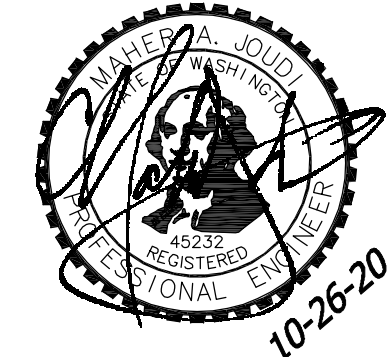
PENNY LANE SOUTH

TREE RETENTION PLAN

24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



APR
MAJ
MAJ
MAJ

REVISION
CITY COMMENTS
CITY COMMENTS
AS-BUILT
AS-BUILT
M.Y.L.A.R.S.
DATE
06/13/17
07/12/17
11/11/19
10/26/20

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

DRAWING: C5

SHEET: 5 OF 31

AS-BUILT NO. 17-0301

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575

TREE TABLE

TREE NO.	SPECIES	DBH	ADJ. DBH	DRIPLINE	HEALTH	REPLACEMENT TREES	REPLACEMENT SPECIES
101	DOUGLAS FIR	28.5	28.5	21	Viable	2	C
102	DOUGLAS FIR	27.5	27.5	21	Viable	2	C
103	DOUGLAS FIR	10	10	16	Viable	1	C
104	WESTERN RED CEDAR	20	20	21	Viable	1	C
105	DOUGLAS FIR	25	25	16	Viable	2	C
106	DOUGLAS FIR	18	18	12	Viable	1	C
107	DOUGLAS FIR	28	28	12	Viable	2	C
108	DOUGLAS FIR	24	24	12	NON-Viable		
109	DOUGLAS FIR	18	18	12	Viable	1	C
110	DOUGLAS FIR	16	16	12	Viable	1	C
111	DOUGLAS FIR	16	16	12	Viable	1	C
112	DOUGLAS FIR	15/15	21	12	Viable	1	C
113	DOUGLAS FIR	15	15	12	Viable	1	C
114	DOUGLAS FIR	15	15	12	Viable	1	C
115	DOUGLAS FIR	14	14	12	NON-Viable		
116	DOUGLAS FIR	16	16	12	NON-Viable		
117	DOUGLAS FIR	28	28	12	NON-Viable		
118	ASPEN	14	14	10	Viable	1	D
120	ASPEN	18	18	12	NON-Viable		
121	ASPEN	17	17	12	Viable	1	D
122	ASPEN	26	26	12	Viable	2	D
123	ASPEN	28	28	13	Viable	2	D
124	ASPEN	13	13	10	Viable	1	D
125	SPRUCE	18	18	15	NON-Viable		
126	DOUGLAS FIR	34	34	21	Viable	3	C
127	DOUGLAS FIR	37	37	18	NON-Viable		
128	DOUGLAS FIR	42	42	18	Viable	3	C
129	DOUGLAS FIR	36	36	16	Viable	3	C
130	DOUGLAS FIR	36	36	18	NON-Viable		
131	DOUGLAS FIR	40	40	21	NON-Viable		
132	DOUGLAS FIR	30	30	16	Viable	2	C
133	DOUGLAS FIR	30	30	16	Viable	2	C
134	DOUGLAS FIR	40	40	21	Viable	3	C
135	LOGEPOLE PINE	15	15	12	Viable	1	C
136	DOUGLAS FIR	32	32	19	Viable	3	C
137	DOUGLAS FIR	31	31	17	Viable	2	C
138	DOUGLAS FIR	30	30	15	Viable	2	C
139	DOUGLAS FIR	32.5	32.5	16	Viable	3	C
140	DOUGLAS FIR	35	35	18	Viable	3	C
141	DOUGLAS FIR	18	18	16	Viable	1	C
142	DOUGLAS FIR	23	23	17	Viable	2	C
143	DOUGLAS FIR	8/18	19.5	16	NON-Viable		
144	DOUGLAS FIR	26	26	20	Viable	2	C
145	DOUGLAS FIR	39	39	18	Viable	3	C
146	DOUGLAS FIR	35.5	35.5	20	Viable	3	C
147	DOUGLAS FIR	39	39	18	NON-Viable		
148	DOUGLAS FIR	32	32	18	Viable	3	C
149	DOUGLAS FIR	36	36	19	Viable	3	C
150	DOUGLAS FIR	12/12	17	15	NON-Viable		
151	DOUGLAS FIR	19	19	15	NON-Viable		
152	DOUGLAS FIR	24	24	15	Viable	2	C
153	DOUGLAS FIR	9	9	15	NON-Viable		
154	DOUGLAS FIR	15	15	15	Viable	1	C
155	DOUGLAS FIR	19	19	15	Viable	1	C
156	DOUGLAS FIR	31	31	15	NON-Viable		
157	DOUGLAS FIR	10	10	15	NON-Viable		
159	DOUGLAS FIR	24	24	15	Viable	2	C
160	DOUGLAS FIR	18	18	15	NON-Viable		
161	DOUGLAS FIR	12	12	15	NON-Viable		
162	DOUGLAS FIR	9	9	6	NON-Viable		
163	DOUGLAS FIR	8	8	6	NON-Viable		
164	DOUGLAS FIR	18	18	6	NON-Viable		
165	DOUGLAS FIR	27	27	6	NON-Viable		
166	DOUGLAS FIR	8	8	6	Viable	1	C
167	DOUGLAS FIR	26	26	6	NON-Viable		
168	DOUGLAS FIR	12	12	6	Viable	1	C
169	DOUGLAS FIR	16	16	6	Viable	1	C
170	DOUGLAS FIR	18	18	15	NON-Viable		
171	DOUGLAS FIR	39	39	18	Viable	3	C
173	DOUGLAS FIR	40	40	21	Viable	3	C
174	RIVER BIRCH	15	15	14	NON-Viable		
175	DOUGLAS FIR	29	29	16	NON-Viable		

TREE TABLE

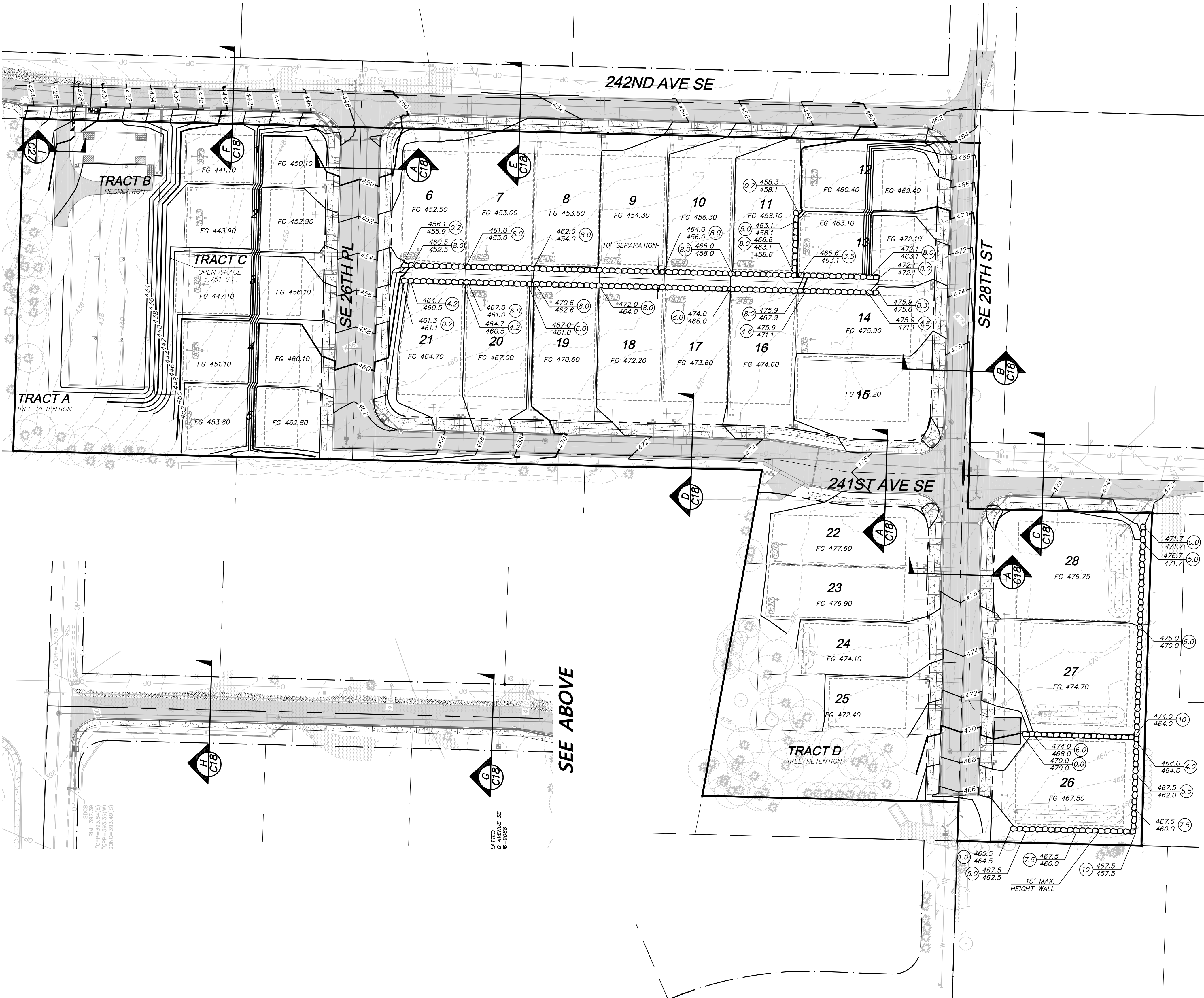
TREE NO.	SPECIES	DBH	ADJ. DBH	DRIPLINE	HEALTH	TREE CREDIT	REPLACEMENT TREES	REPLACEMENT SPECIES
176	DOUGLAS FIR	33	33	27	Viable		3	C
177	DOUGLAS FIR	48	48	30	Viable		3	C
178	DOUGLAS FIR	38.5	38.5	21	Viable		3	C
179	NOBLE FIR	11	11	5	Viable		1	C
180	NOBLE FIR	11	11	5	Viable		1	C
181	NOBLE FIR	8	8	8	Viable		1	C
182	NOBLE FIR	10	10	8	Viable		1	C
183	BIGLEAF MAPLE	20/22/27	40	30	NON-Viable			
184	WESTERN RED CEDAR	15	15	16	Viable		1	C
185	GRAND FIR	8	8	8	Viable		1	C
186	DOUGLAS FIR	16	16	12	Viable		1	C
187	SEQUOIA	54	54	15	Viable		3	C
188	SEQUOIA	47	47	15	Viable		3	C
189	SEQUOIA	41.5	41.5	15	Viable		3	C
190	SEQUOIA	43.5	43.5	15	NON-Viable			
191	BEECH	9/13	16	15	NON-Viable			
192	BEECH	15	15	15	NON-Viable			
233	LOGEPOLE PINE	13	13	9	Viable		1	C
234	DOUGLAS FIR	29	29	20	Viable		2	C
238	DOUGLAS FIR	19	19	14	Viable		1	C
239	DOUGLAS FIR	30	30	18	Viable		2	C
243	DOUGLAS FIR	24	24	15	Viable		2	C
244	DOUGLAS FIR	24	24	14	Viable	1.75		
249	DOUGLAS FIR	24	24	10	NON-Viable			
250	DOUGLAS FIR	24	24	16	Viable	1.75		
251	FRAZIER	10	10	11	NON-Viable			
252	GRAND FIR	10.5	10.5	8	NON-Viable			
253	GRAND FIR	10	10	10	NON-Viable			
254	GRAND FIR	10	10	11	NON-Viable			
255	DOUGLAS FIR	32	32	15	Viable		3	C
256	OAK	23	23	29	Viable		2	D
257	DOUGLAS FIR	34	34	18	Viable	2		
258	DOUGLAS FIR	34	34	17	Viable	2		
259	DOUGLAS FIR	29	29	17	Viable	1.75		
260	GRAND FIR	9	9	10	Viable	1		
261	DOUGLAS FIR	21	21	18	Viable	1		
262	DOUGLAS FIR	23	23	9	Viable	1.75		
265	DOUGLAS FIR	27	27	18	NON-Viable			
266	DOUGLAS FIR	25	25	16	Viable		2	C
267	DOUGLAS FIR	16	16	16	Viable		1	C
268	GRAND FIR	12	12	12	Viable	1		
269	GRAND FIR	9	9	12	Viable	1		
270	GRAND FIR	10	10	12	Viable	1		
271	DOUGLAS FIR	30.5	30.5	19	Viable		2	C
272	DOUGLAS FIR	22	22	13	Viable	1.75		
279	DOUGLAS FIR	30	30	20	Viable		2	C
280	DOUGLAS FIR	31.5	31.5	23	Viable		2	C
282	DOUGLAS FIR	21	21	14	Viable	1		
283	DOUGLAS FIR	13	13	16	Viable	1		
284	DOUGLAS FIR	12	12	12	Viable	1		
285	DOUGLAS FIR	29.5	29.5	19	NON-Viable			
286	DOUGLAS FIR	29.5	29.5	19	Viable	1.75		
289	BIGLEAF MAPLE	20	20	28	Viable		1	D
290	DOUGLAS FIR	40	40	20	Viable		3	C
291	ALDER	12	12	14	NON-Viable			
292	DOUGLAS FIR	33	33	16	Viable		3	C
293	DOUGLAS FIR	8	8	6	Viable	1		
294	DOUGLAS FIR	8	8	9	Viable	1		
295	DOUGLAS FIR	11	11	10	Viable	1		
298	BIGLEAF MAPLE CLUSTER	18/9/7	21.5	24	NON-Viable			
299	DOUGLAS FIR	14	14	10	Viable		1	C
300	DOUGLAS FIR	14	14	10	Viable		1	C
301	DOUGLAS FIR	17	17	16	Viable		1	C
302	DOUGLAS FIR	33	33	15	Viable		3	C
303	ALDER	12	12	14	NON-Viable			
304	ALDER	16	16	14	NON-Viable			
305	DOUGLAS FIR	20	20	14	Viable		1	C
306	DOUGLAS FIR	24	24	17	Viable		2	C
307	DOUGLAS FIR	23	23	16	Viable		2	C
308	DOUGLAS FIR	23	23	16	NON-Viable			
309	JAPANESE MAPLE	7/7/9	13.5	16	Viable		1	D
310	JAPANESE MAPLE	10/10/12	18.5	16	Viable		1	D

TREE TABLE

TREE NO.	SPECIES	DBH	ADJ. DBH	DRIPLINE	HEALTH	TREE CREDIT	REPLACEMENT TREES	REPLACEMENT SPECIES
331	DOUGLAS FIR	17	17	15	Viable		1	C
334	WESTERN RED CEDAR	8/12	14.5	11	Viable	1		
335	WESTERN RED CEDAR	12	12	12	Viable	1		
336	BIRCH	14/15	20.5	18	Viable		1	D
337	DOUGLAS FIR	9	9	10	Viable	1		
338	CHERRY	14	14	16	Viable	1		
339	WESTERN RED CEDAR	13	13	12	Viable	1		
340	WESTERN RED CEDAR	11	11	12	Viable	1		
341	WESTERN RED CEDAR	10	10	12	Viable	1		
342	WESTERN RED CEDAR	10	10	12	Viable	1		
343	BIGLEAF MAPLE	24	24	28	Viable	1.75		
344	DOUGLAS FIR	42	42	17	Viable	2		
345	DOUGLAS FIR	28	28	16	Viable	1.75		
346	DOUGLAS FIR	29	29	16	Viable	1.75		
347	BIGLEAF MAPLE	20	20	20	Viable	1		
348	DOUGLAS FIR	27	27	16	Viable	1.75		
350	DOUGLAS FIR	8	8	6	Viable	1		
351	DOUGLAS FIR	28	28	18	Viable	1.75		
352	DOUGLAS FIR	12	12	15	Viable	1		
353	DOUGLAS FIR	8	8	6	Viable	1		
354	DOUGLAS FIR	15	15	16	Viable	1		
355	DOUGLAS FIR	8	8	14	Viable	1		
356	WESTERN RED CEDAR	20	20	14	Viable	1		
357	WESTERN RED CEDAR	14	14	16	Viable	1		
359	DOUGLAS FIR	21	21	12	Viable	1		
360	DOUGLAS FIR	8	8	6	Viable	1		
361	DOUGLAS FIR	11	11	12	Viable	1		
362	DOUGLAS FIR	28	28	16	Viable	1.75		
363	DOUGLAS FIR	28	28	18	Viable	1.75		
364	WESTERN RED CEDAR	12	12	12	Viable	1		
365	DOUGLAS FIR	21	21	16	Viable	1		
366	DOUGLAS FIR	29	29	16	Viable	1.75		
367	LEYLANDII CYPRESS	4/8/5	10	10	Viable	1		
368	LEYLANDII CYPRESS	6/5/3/4	9	10	Viable	1		
369	LEYLANDII CYPRESS	9	9	10	Viable	1		
370	LEYLANDII CYPRESS	7/5/4/3	10	10	Viable	1		
371	LEYLANDII CYPRESS	9	9	10	Viable	1		
372	LEYLANDII CYPRESS	9	9	10	Viable	1		
373	LEYLANDII CYPRESS	7/7	10	10	Viable	1		
374	WESTERN RED CEDAR	14	14	12	Viable	1		
375	WESTERN RED CEDAR	22	22	15	Viable		2	C
376	DOUGLAS FIR	18	18	16	Viable	1		
377	WESTERN RED CEDAR	16	16	16	Viable	1		
378	WESTERN RED CEDAR	20	20	18	Viable	1		
379	WESTERN RED CEDAR	20	20	14	Viable	1		
380	GOLDEN LOCUST	11	11	18	Viable		1	D
381	WESTERN RED CEDAR	10	10	10	Viable		1	C
382	WESTERN RED CEDAR	30	30	17	Viable	1.75		
383	WESTERN RED CEDAR	29	29	18	Viable		2	C
384	WESTERN RED CEDAR	35	35	14	Viable		3	C
385	WESTERN RED CEDAR	18	18	14	Viable		1	C
386	WESTERN RED CEDAR	33	33	14	Viable		3	C
387	DOUGLAS FIR	19	19	14	NON-Viable			
388	DOUGLAS FIR	22	22	16	NON-Viable			
397	BIGLEAF MAPLE	12/11/9	18.5	16	NON-Viable			
398	BIGLEAF MAPLE	13	13	16	NON-Viable			
399	WESTERN RED CEDAR	13	13	14	NON-Viable			
400	HEMLOCK	13	13	14	NON-Viable			
401	BIGLEAF MAPLE	8/9/9/13	20	18	Viable		1	D
402	WESTERN RED CEDAR	19	19	14	Viable		1	C
403	WESTERN RED CEDAR	21	21	14	Viable		1	C
404	CHERRY	12	12	16	Viable		1	D
405	DOUGLAS FIR	15	15	12	Viable		1	C
406	DOUGLAS FIR	20	20	16	NON-Viable			
407	DOUGLAS FIR	14	14	15	Viable		1	C
408	DOUGLAS FIR	26	26	15	Viable		2	C
409	DOUGLAS FIR	12	12	12	NON-Viable			
410	DOUGLAS FIR	10	10	8	NON-Viable			
411	WESTERN RED CEDAR	20	20	14	Viable		1	C
412	DOUGLAS FIR	16	16	12	Viable		1	C
413	WESTERN RED CEDAR	15	15	12	Viable		1	C
414	WESTERN RED CEDAR	15	15	14	Viable		1	C

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.
PENNY LANE SOUTH
SDP2017-00575

SEE BELOW



SEE ABOVE

BENCHMARK:
KING COUNTY PUBLIC WORKS SURVEY BRANCH (KCPWSB) VERTICAL CONTROL POINT NUMBER 2225, AT THE INTERSECTION OF 24TH ST AND 244TH AVE SE, FOUND CONCRETE MONUMENT WITH 3" BRASS DISK, 1.3' BELOW GRADE, IN A MONUMENT CASE, STAMPED WITH THE AGENCY, THE YEAR, THE SECTIONS, THE TOWNSHIP AND THE RANGE.
ELEVATION = 403.32 FEET.

VERTICAL DATUM:
NAVD 88 PER KING COUNTY PUBLIC WORKS SURVEY BRANCH (KCPWSB) VERTICAL CONTROL

BASIS OF BEARINGS:
N88°10'58"W BETWEEN THE MONUMENTS FOUND IN PLACE AT THE NORTHEAST SECTION CORNER AND THE NORTHQUARTER CORNER SECTION 10-24-6 PER REFERENCE 1.

NOTES:
1. MONUMENTS SHALL CONFORM TO DETAIL PER SHEET C17.
2. FINAL PLAT TO IDENTIFY LOT CORNERS AND OTHER MONUMENTATION.

WALL NOTES:
1. ALL WALLS GREATER THAN 4-FEET IN HEIGHT REQUIRE A SEPARATE BUILDING PERMIT.
2. WALL HEIGHT CALLOUTS ARE FINISHED GRADE TO FINISHED GRADE, NOT TO BOTTOM OF CONSTRUCTED WALL. CONTRACTOR MUST ACCOUNT FOR MINIMUM BURY AND MAY NEED TO ADJUST HEIGHTS BASED UPON WALL UNIT DIMENSIONS.

LEGEND:
--- ROCKERY, SEE DETAIL ON SHEET R1
--- FG PAD LIMIT

GRADING NOTES:
1. THE SUITABILITY OF USING THE ON-SITE SOILS AS STRUCTURAL FILL SHALL BE EVALUATED BY A GEOTECHNICAL ENGINEER DURING CONSTRUCTION.
2. TEMPORARY SLOPES OVER FOUR FEET IN HEIGHT SHALL BE NO STEEPER THAN 1.5H:1V. A GEOTECHNICAL ENGINEER SHALL OBSERVE TEMPORARY AND PERMANENT SLOPES TO VERIFY THAT THE INCLINATION IS APPROPRIATE FOR THE CONDITIONS EXPOSED. TEMPORARY SHORING MAY BE NECESSARY.

FG ELEVATION NOTE:
FG ELEVATION CALLOUTS REFER TO FINISHED GRADE ELEVATION, NOT STRUCTURAL PAD ELEVATION.

SITE VOLUME CALCULATIONS		
CUT VOLUME (CU. YDS.)	FILL VOLUME (CU. YDS.)	NET VOLUME (CU. YDS.)
25,412	22,937	2,475 EXPORT
ALL VOLUMES ARE APPROXIMATE. THE VOLUMES DO NOT INCLUDE EXPANSION FACTOR OR ANY SOIL TYPE RESTRICTIONS. THE VOLUMES INCLUDE STRUCTURAL EXCAVATION FOR VAULT.		

THESE PLANS ARE RECORD DRAWINGS AND THE INFORMATION SHOWN ACCURATELY REFLECTS EXISTING FIELD CONDITIONS AS OF 11/06/19.

NORTH
GRAPHIC SCALE
0 25 50 100
1 INCH = 50 FT.

AS-BUILT
NO AS-BUILT INFORMATION ON THIS SHEET.

Call 2 Working Days Before You Dig
811
Utilities Underground Location Center
(D.M.T.N.D. OR WA)

SUBDIVISION	
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this _____ day of _____, 20____.	
City Planner	
Public Works Development Review Engineer	

R:\2015\015065\3\Drawings\As-builts\Plots\AB_11-3FG15065.dwg 12/17/2019 11:44:09 AM
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DRS
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CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH
GRADING PLAN
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC
9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147

REGISTERED PROFESSIONAL ENGINEER
10-26-20

REVISION	DATE	BY	REVISION
1	06/13/17	APR	REVISED
2	07/12/17	MAJ	REVISED
3	11/11/19	MAJ	REVISED
4	10/26/20	MAJ	REVISED

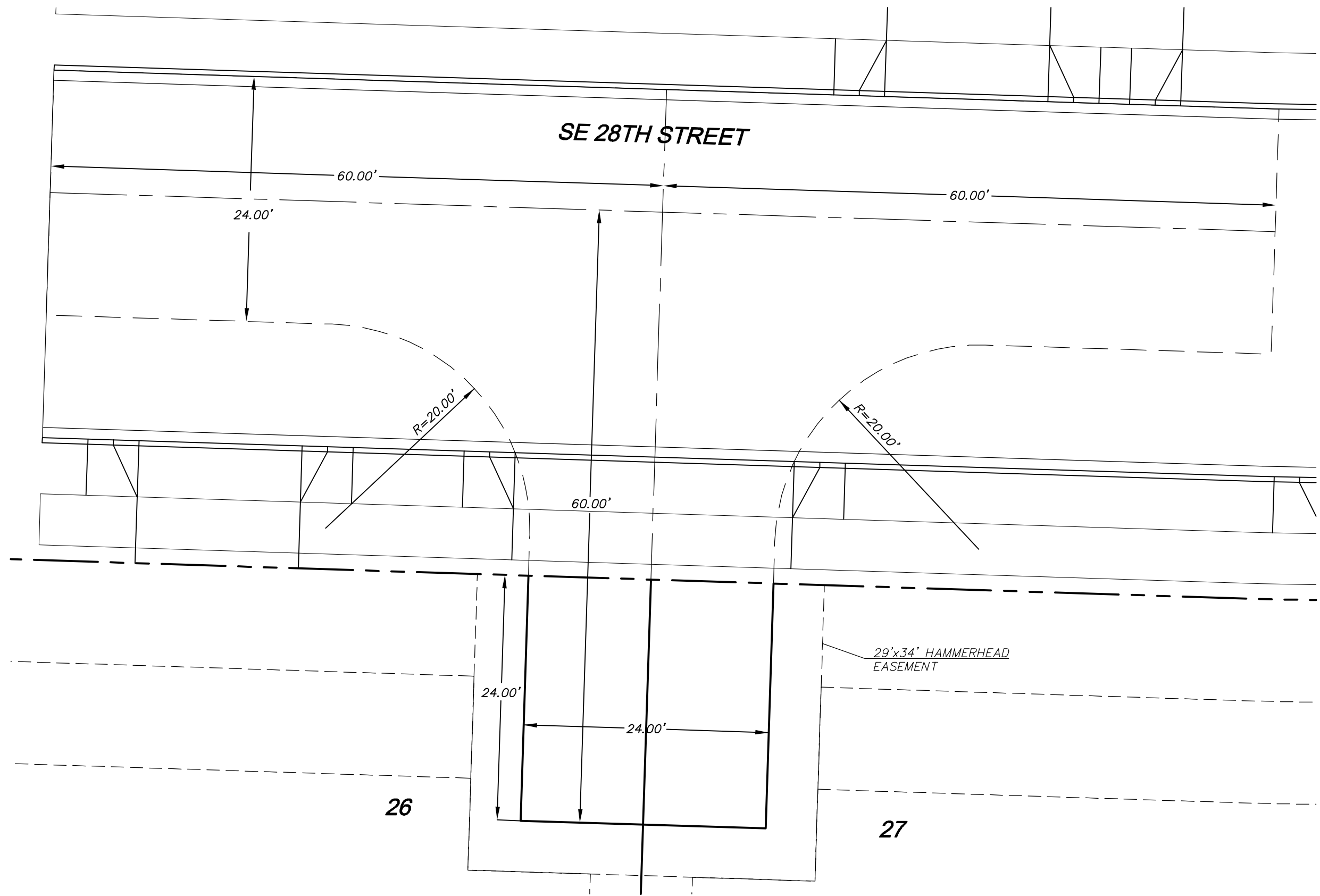
DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C11
SHEET: 11 OF 31

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

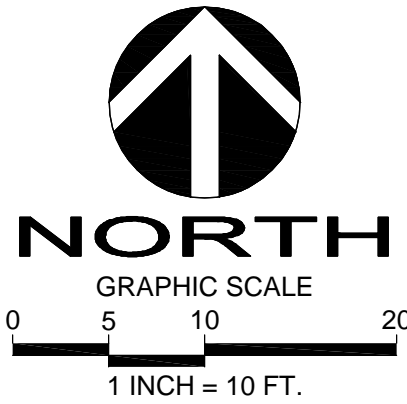
PENNY LANE SOUTH

SDP2017-00575

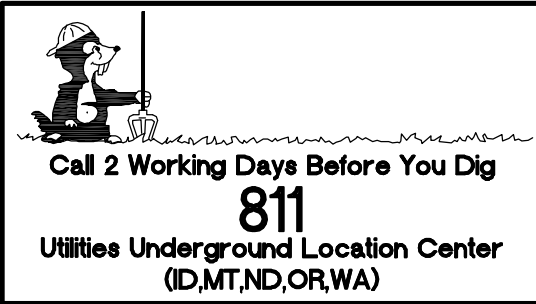


HAMMERHEAD DETAIL

THESE PLANS ARE RECORD DRAWINGS AND THE INFORMATION SHOWN ACCURATELY REFLECTS EXISTING FIELD CONDITIONS AS OF 11/06/19.

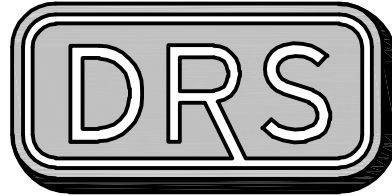


AS-BUILT
NO AS-BUILT INFORMATION ON THIS SHEET.



SUBDIVISION	
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this ____ day of _____, 20____.	
City Planner	
Public Works Development Review Engineer	

R: \2015\0\15065\3\Drawings\As-builts\Plots\AB_12,13-3RAMPDET15065.dwg 12/17/2019 11:46:12 AM
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PENNY LANE SOUTH

HAMMERHEAD DETAIL
24106 & 24124 SE 28TH ST.;
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WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
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APR
MAJ
MAJ
MAJ

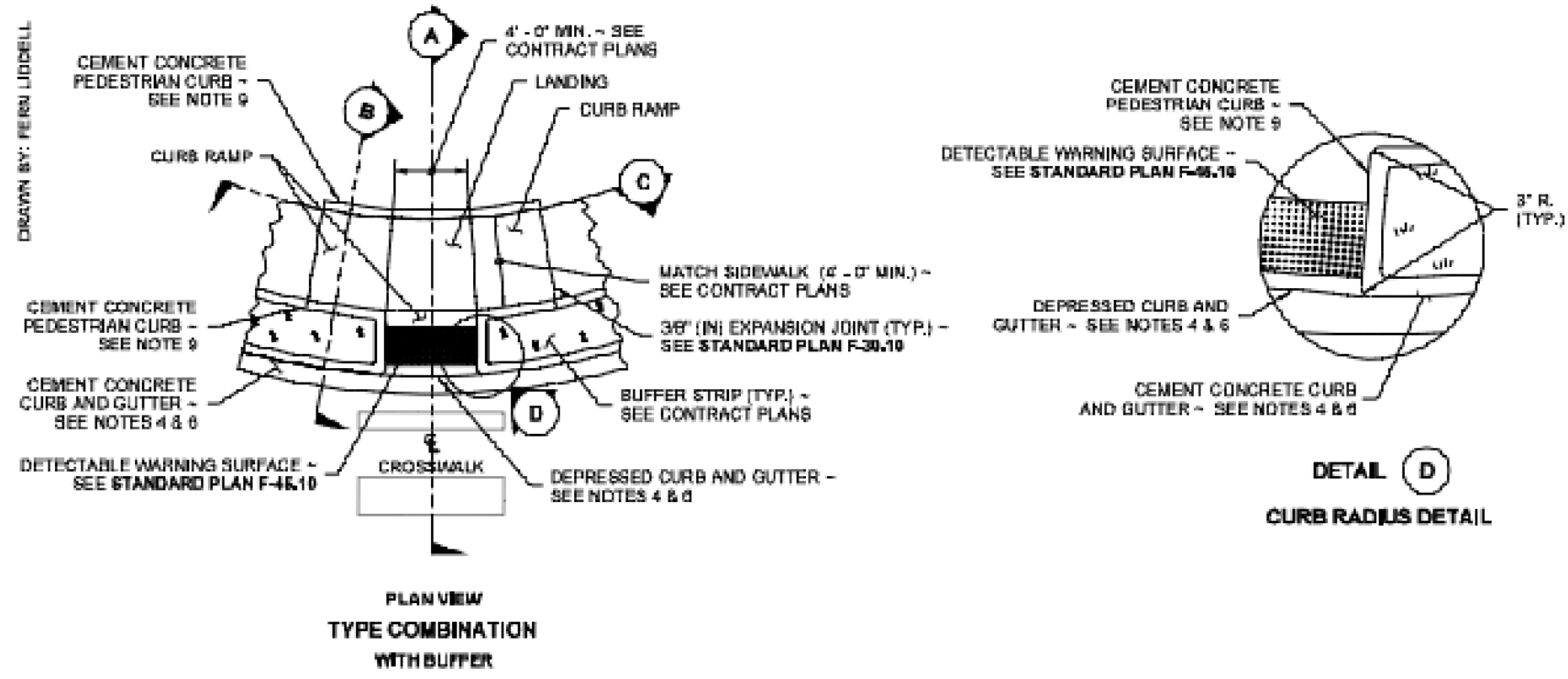
REVISION
DATE
06.13.17
07.12.17
11.11.19
10.26.20
CITY COMMENTS
CITY COMMENTS
AS-BUILT
AS-BUILT MYLARS

DRAFTED BY: **CEN**
DESIGNED BY: **YLP**
PROJECT ENGINEER: **MAJ**
DATE: **02.15.17**
PROJECT NO.: **15065**

DRAWING: **C13**
SHEET: **13 OF 31**

PENNY LANE SOUTH

SDP2017-00575

**NOTES**

- At marked crosswalks, the connection between the curb ramp and the roadway must be contained within the width of the crosswalk markings.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the landing connects to the roadway.
- See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb, Gutter and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
- The Bid Item "Cement Concrete Curb Ramp Type ____" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
- The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include the abutting landing in the 15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
- Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will not be material to retain.

LEGEND

SLOPE IN EITHER DIRECTION

1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)

7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.)

Zeller, Scott
Jun 24 2016 7:20 AM**COMBINATION CURB RAMP**

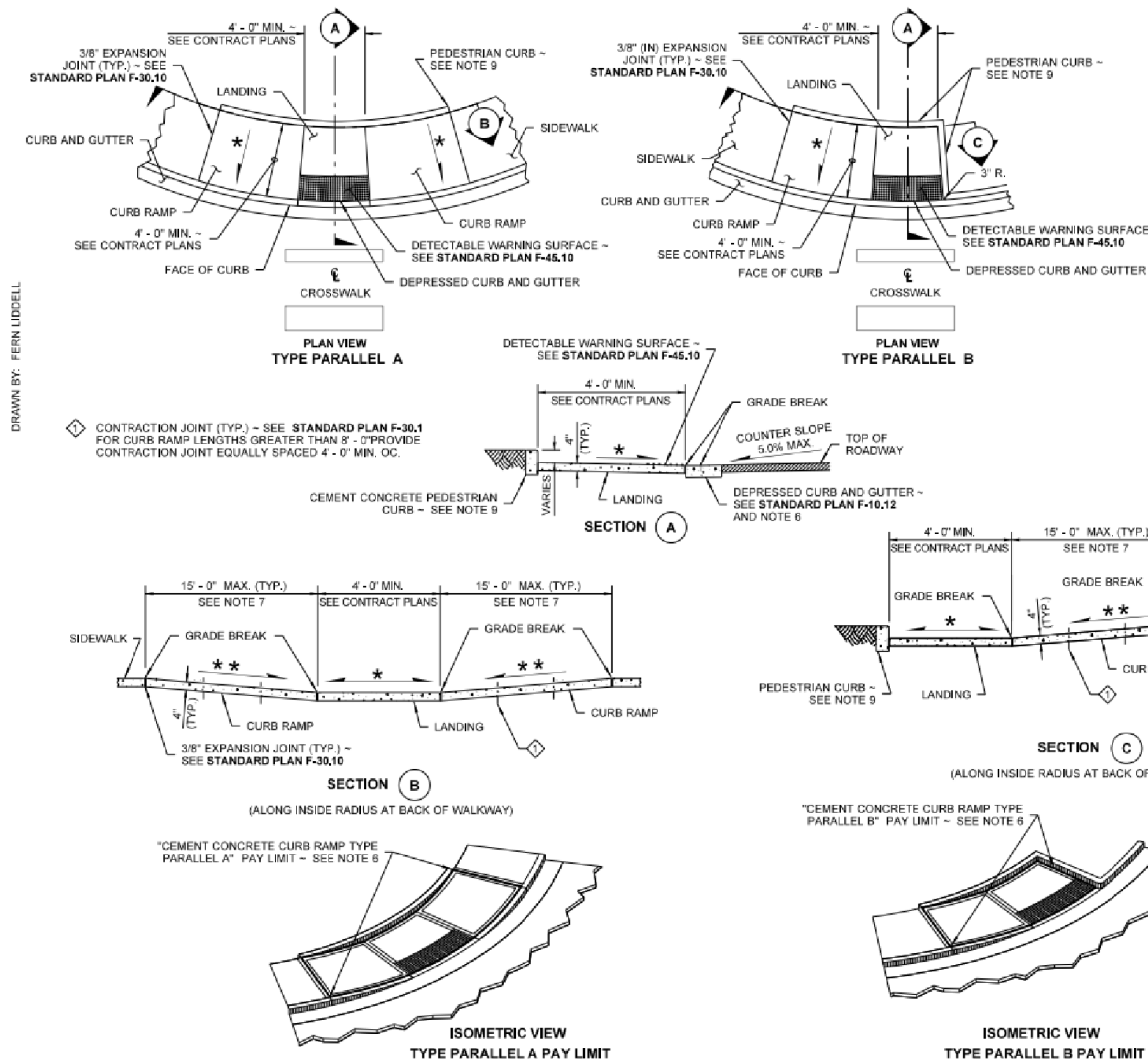
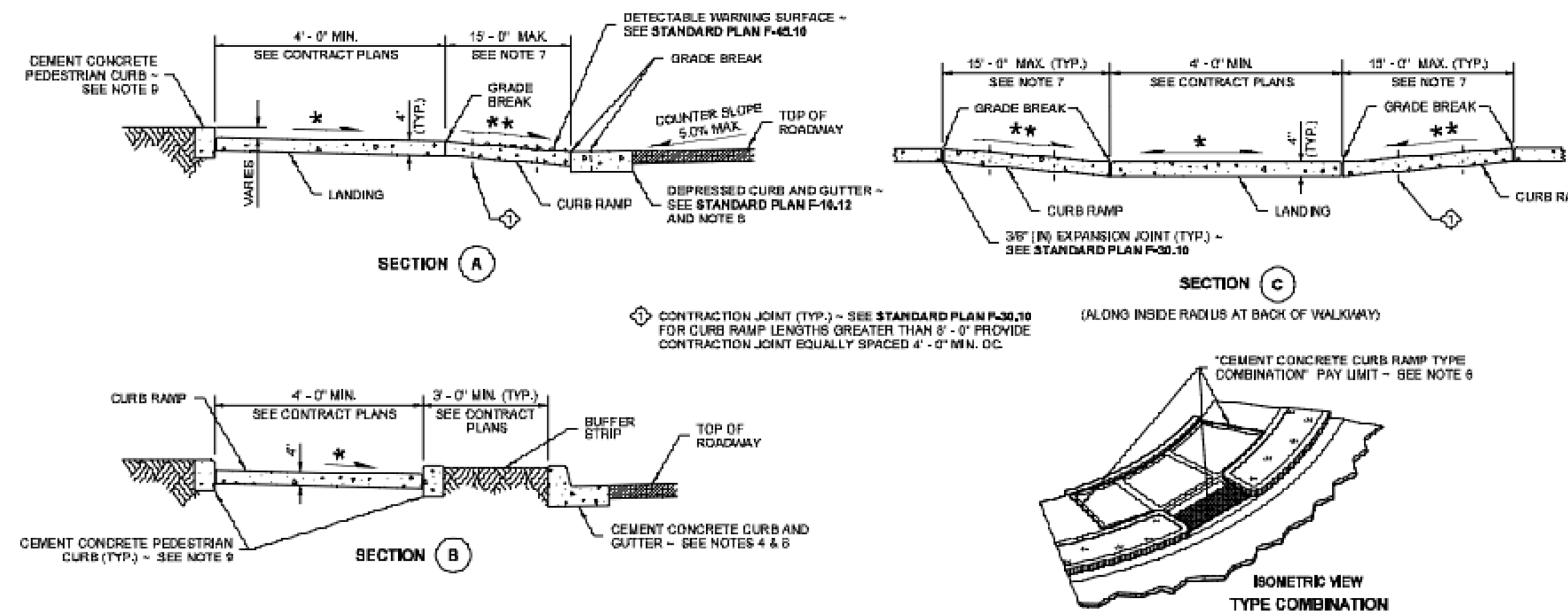
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Carpendor, Jeff
Jun 29 2016 2:36 PM

STATE DESIGN ENGINEER

Washington State Department of Transportation

**NOTES**

- At marked crosswalks, the connection between the landing and the roadway must be contained within the width of the crosswalk markings.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the Landing connects to the roadway.
- See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
- The Bid Item "Cement Concrete Curb Ramp Type ____" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
- The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include abutting landing(s) in the 15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
- Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.

LEGEND

SLOPE IN EITHER DIRECTION

1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)

7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.) - SEE NOTE 7

Zeller, Scott
Jun 24 2016 7:19 AM**PARALLEL CURB RAMP**

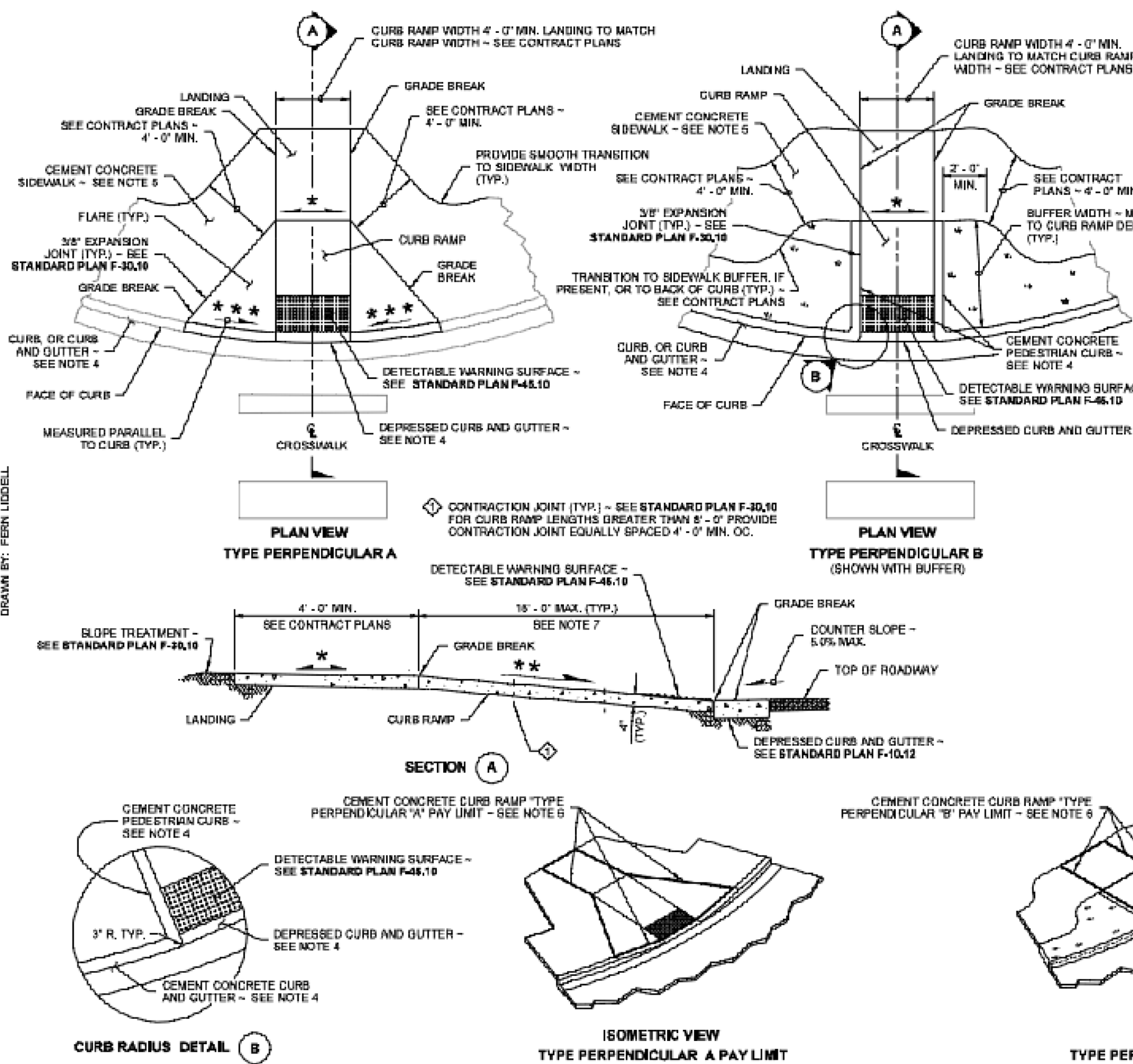
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Carpendor, Jeff
Jun 29 2016 2:27 PM

STATE DESIGN ENGINEER

Washington State Department of Transportation

**NOTES**

- At marked crosswalks, the connection between the curb ramp and the roadway must be contained within the width of the crosswalk markings.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in front of the Curb Ramp where it connects to the roadway.
- See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
- The Bid Item "Cement Concrete Curb Ramp Type ____" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
- The Curb Ramp length is not required to exceed 15 feet (unless shown otherwise in the Contract Plans). When applying the 15-foot max. length, the running slope of the Curb Ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the landing over a horizontal distance of 15 feet. Do not include the abutting landing in the 15-foot max. measurement.
- Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will not be material to retain.

LEGEND

SLOPE IN EITHER DIRECTION

1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)

7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.)

9.2% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (10% MAX.)

Zeller, Scott
Jun 24 2016 7:20 AM**PERPENDICULAR CURB RAMP**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

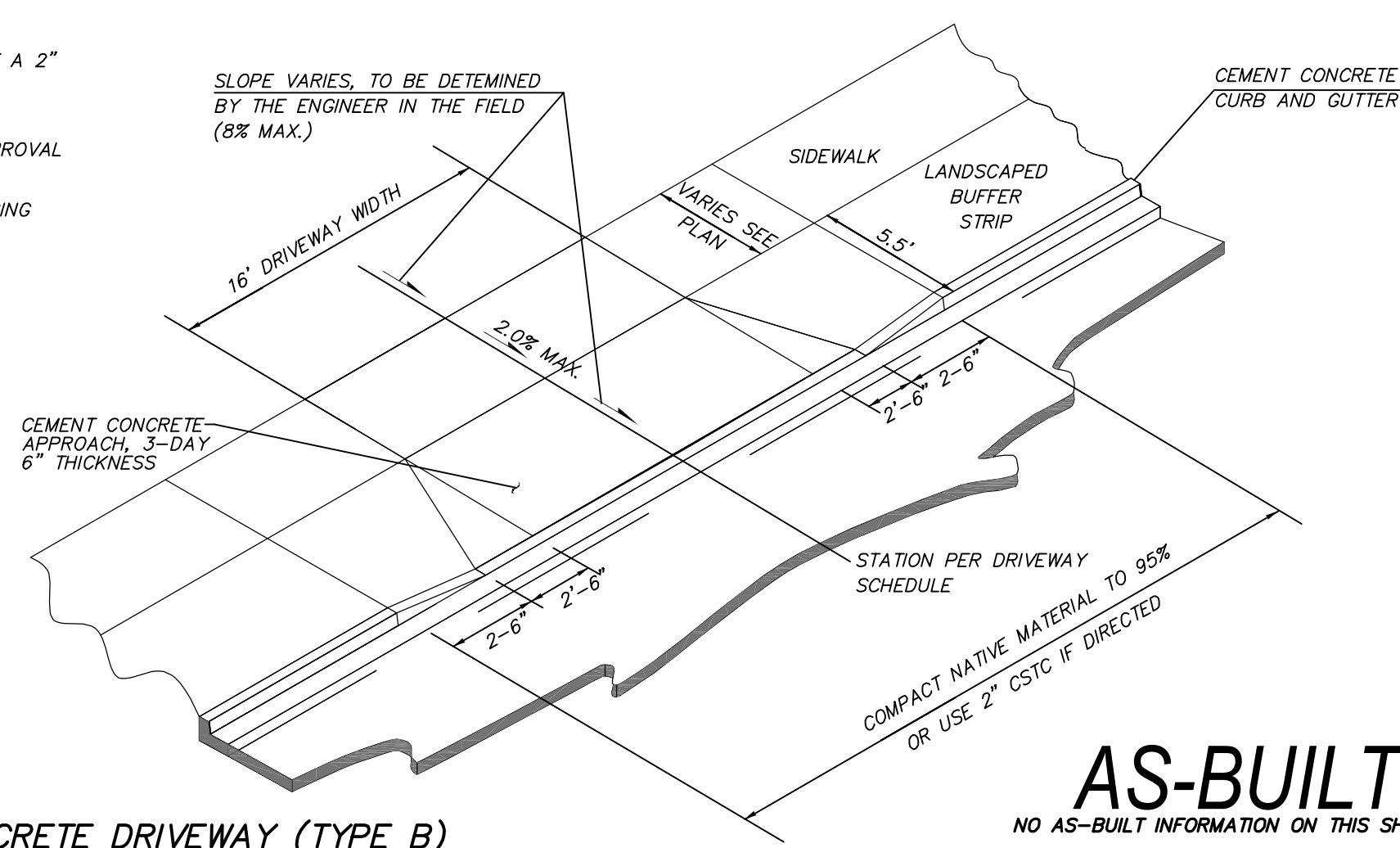
Carpendor, Jeff
Jun 29 2016 2:31 PM

STATE DESIGN ENGINEER

Washington State Department of Transportation

NOTES

- WHEN THE DRIVEWAY WIDTH EXCEEDS 16 FEET, CONSTRUCT A 2" DEEP EXPANSION JOINT SHALL BE PLACED TRANSVERSLY, CENTERED IN WALK.
- 3" OR 3" CSTC MAY BE USED UNDER DRIVEWAY UPON APPROVAL BY THE ENGINEER.
- FORM SUBGRADE INSPECTION ARE REQUIRED BEFORE POURING CONCRETE.
- SEE CITY OF SAMMAMISH SIDEWALK DETAILS, SHEET C16.
- SEE CITY OF SAMMAMISH CURB DETAIL, SHEET C16

**CITY OF SAMMAMISH FIG02-07 CEMENT CONCRETE DRIVEWAY (TYPE B)****AS-BUILT**

NO AS-BUILT INFORMATION ON THIS SHEET.

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Utilities Underground Location Center (DMTND.ORGWA)

SUBDIVISION

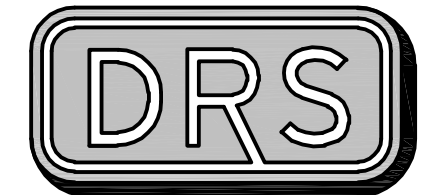
City of Sammamish Approval

Examined and Approved per SMC 20.05

this _____ day of _____, 20____.

City Planner

Public Works Development Review Engineer

**D.R. STRONG**
CONSULTING ENGINEERS

ENGINEERS PLANNERS SURVEYORS

820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423**PENNY LANE SOUTH****ROAD DETAILS**24106 & 24124 SE 28TH ST.;
2525 & 2627 242ND AVE
SAMMAMISH, WA**WOOD CROWN, LLC**9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147APR
MAY
MAY
MAY

REVISION

CITY COMMENTS

AS-BUILT

AS-BUILT

DATE

06/13/17

07/12/17

11/11/19

10/26/20

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

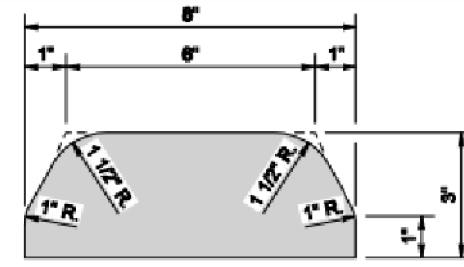
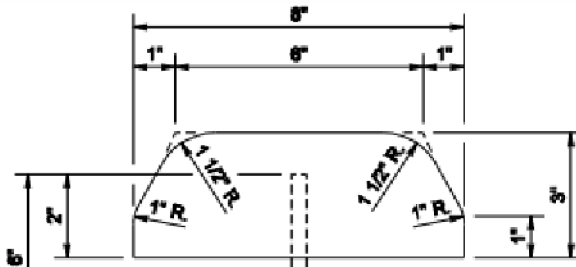
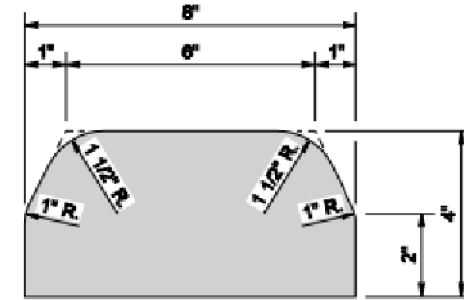
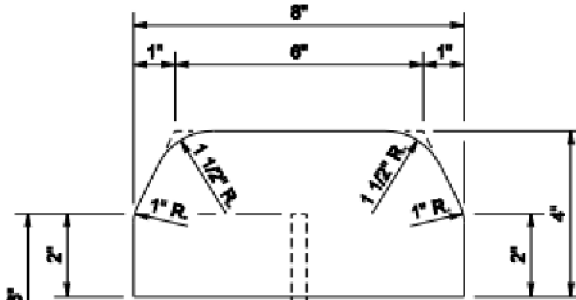
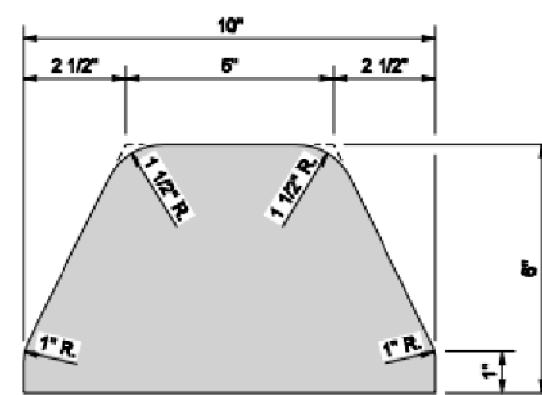
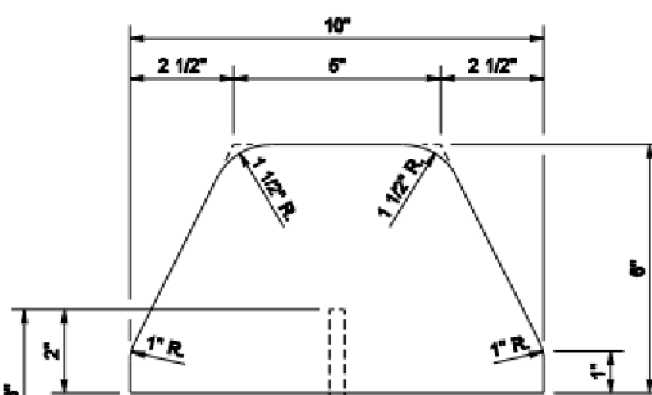
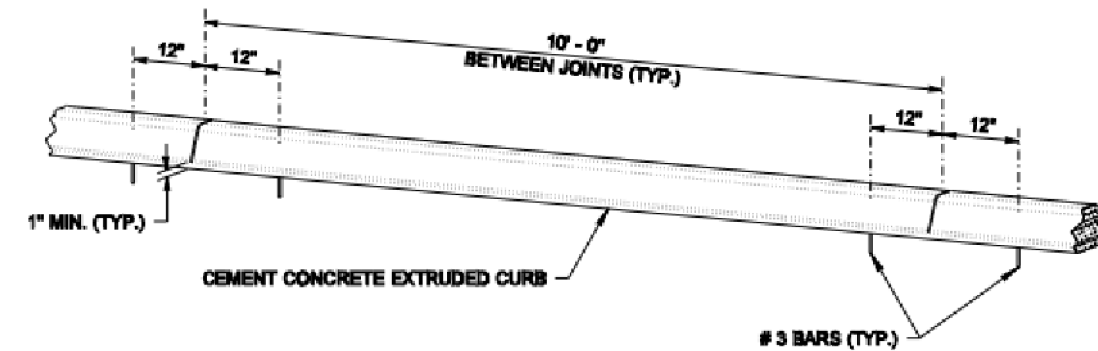
DRAWING: C15

SHEET: 15 OF 31

PENNY LANE SOUTH

SDP2017-00575

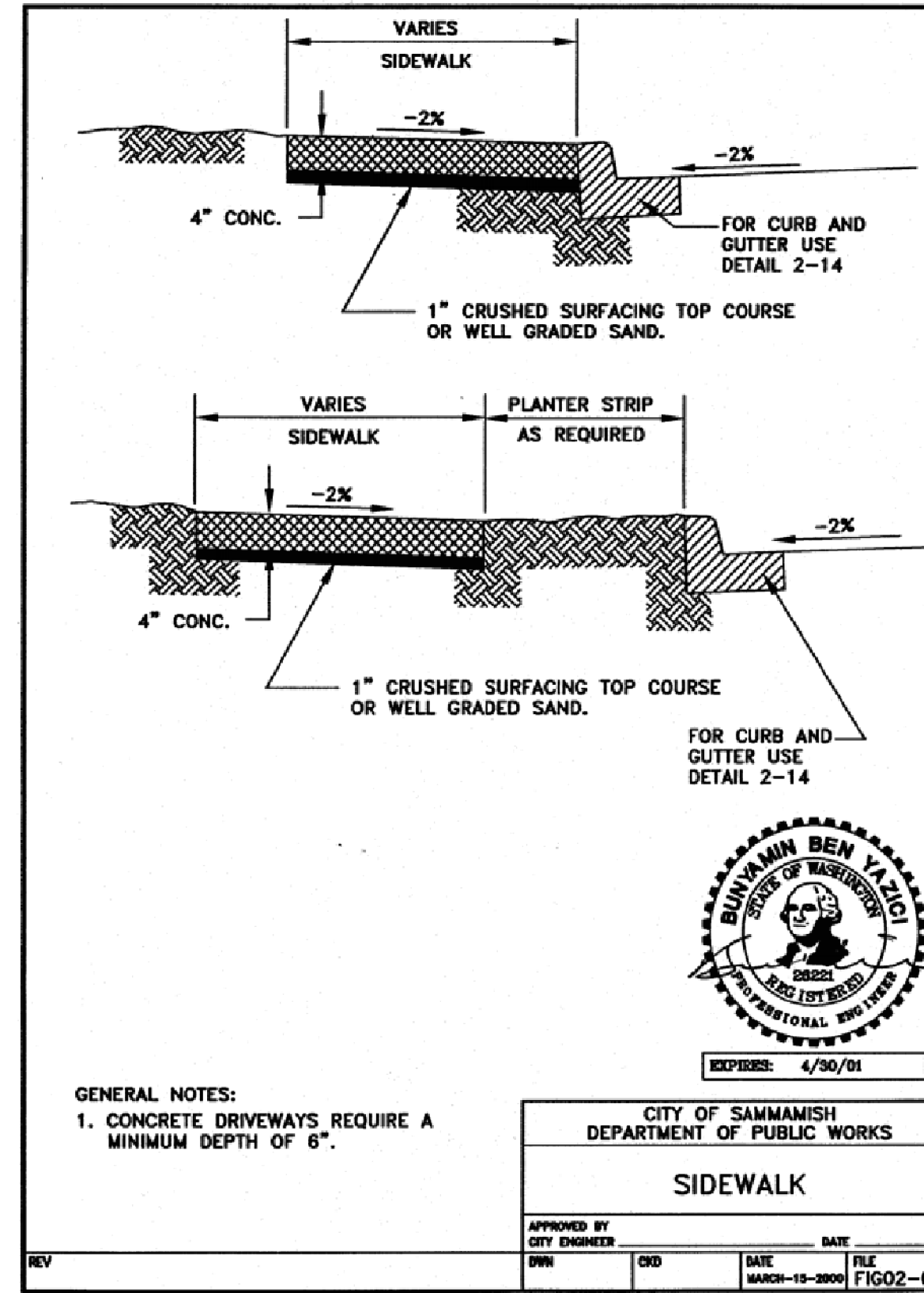
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**TYPE 1**
(HOT MIX ASPHALT)**TYPE 4**
(CEMENT CONCRETE)**TYPE 2**
(HOT MIX ASPHALT)**TYPE 5**
(CEMENT CONCRETE)**TYPE 3**
(HOT MIX ASPHALT)**TYPE 6**
(CEMENT CONCRETE)**SPACING OF ANCHOR BARS**
(FOR TYPES 4, 5, AND 6)

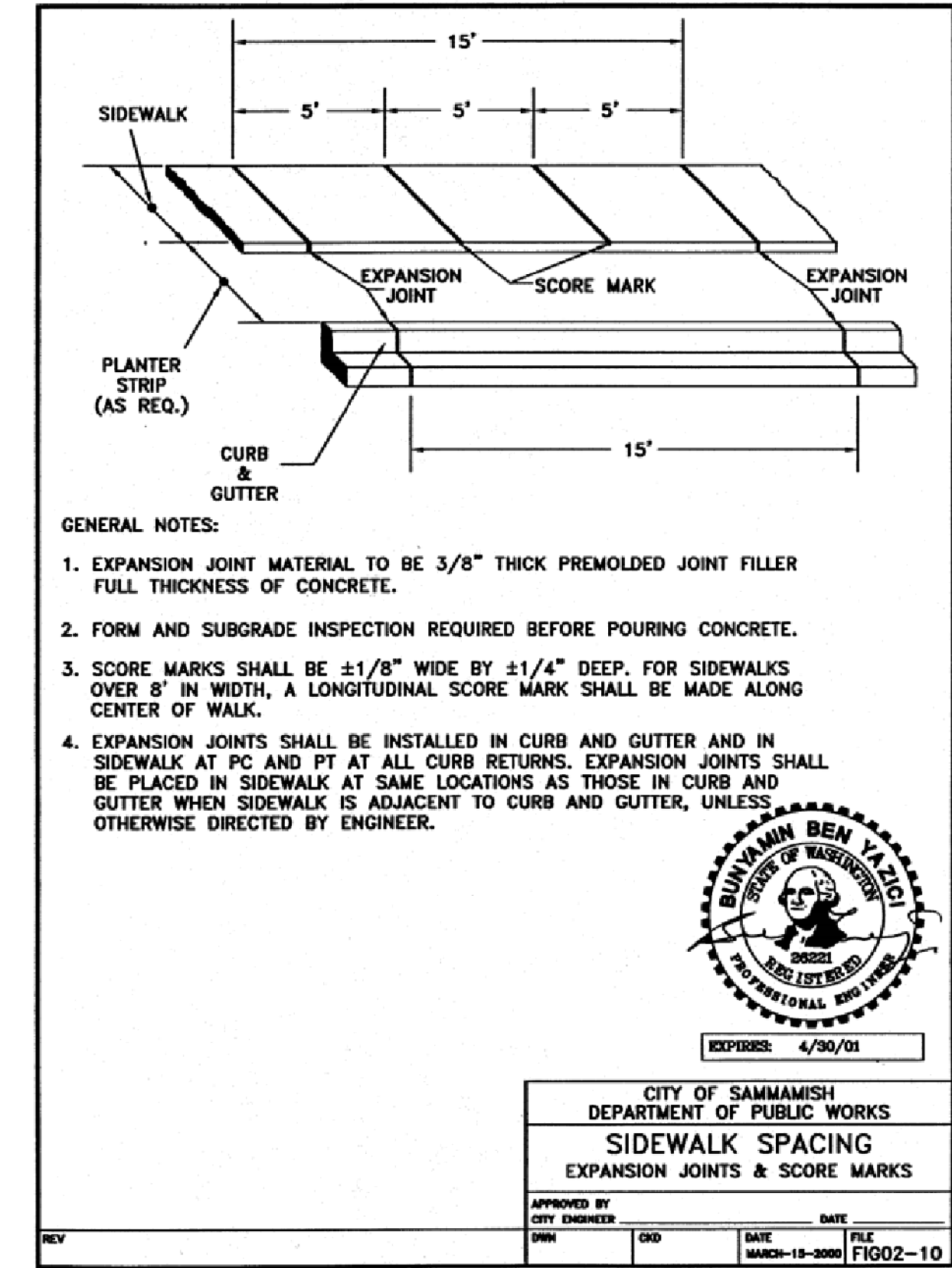
NOTE
JOINTS MAY BE FORMED DURING INSTALLATION USING A RIGID DIVIDER OR SAWCUT AFTER CONCRETE CURES TO MINIMUM STRENGTH.

**EXTRUDED CURB****STANDARD PLAN F-10.42-00**

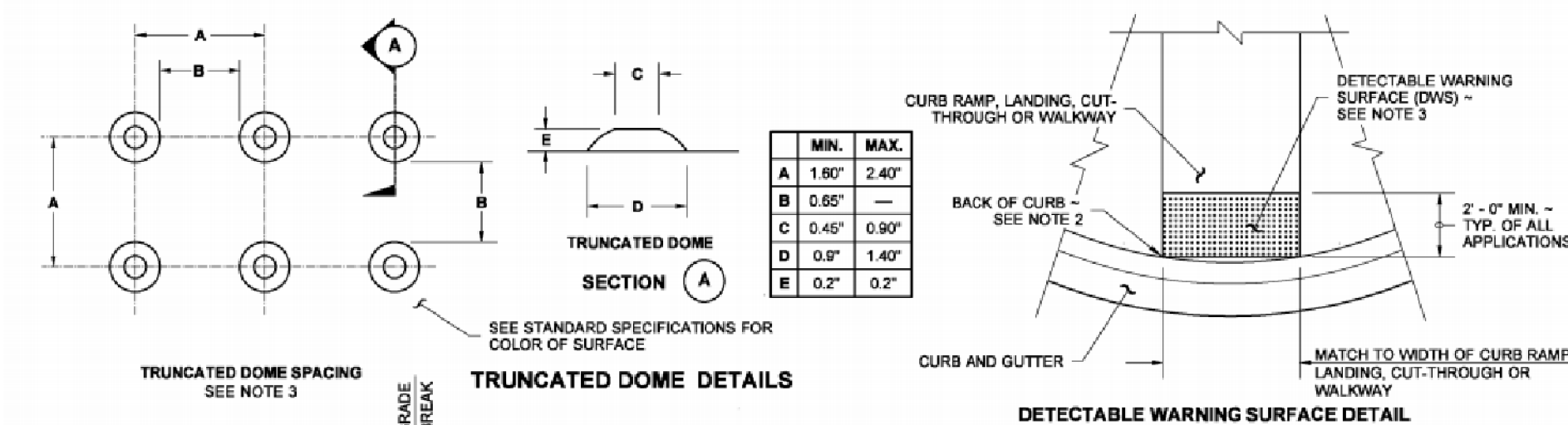
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Ken L. Smith 01-23-07
STATE DESIGN ENGINEER
Washington State Department of Transportation



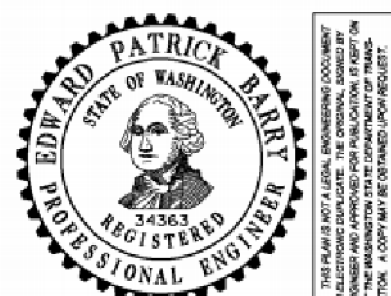
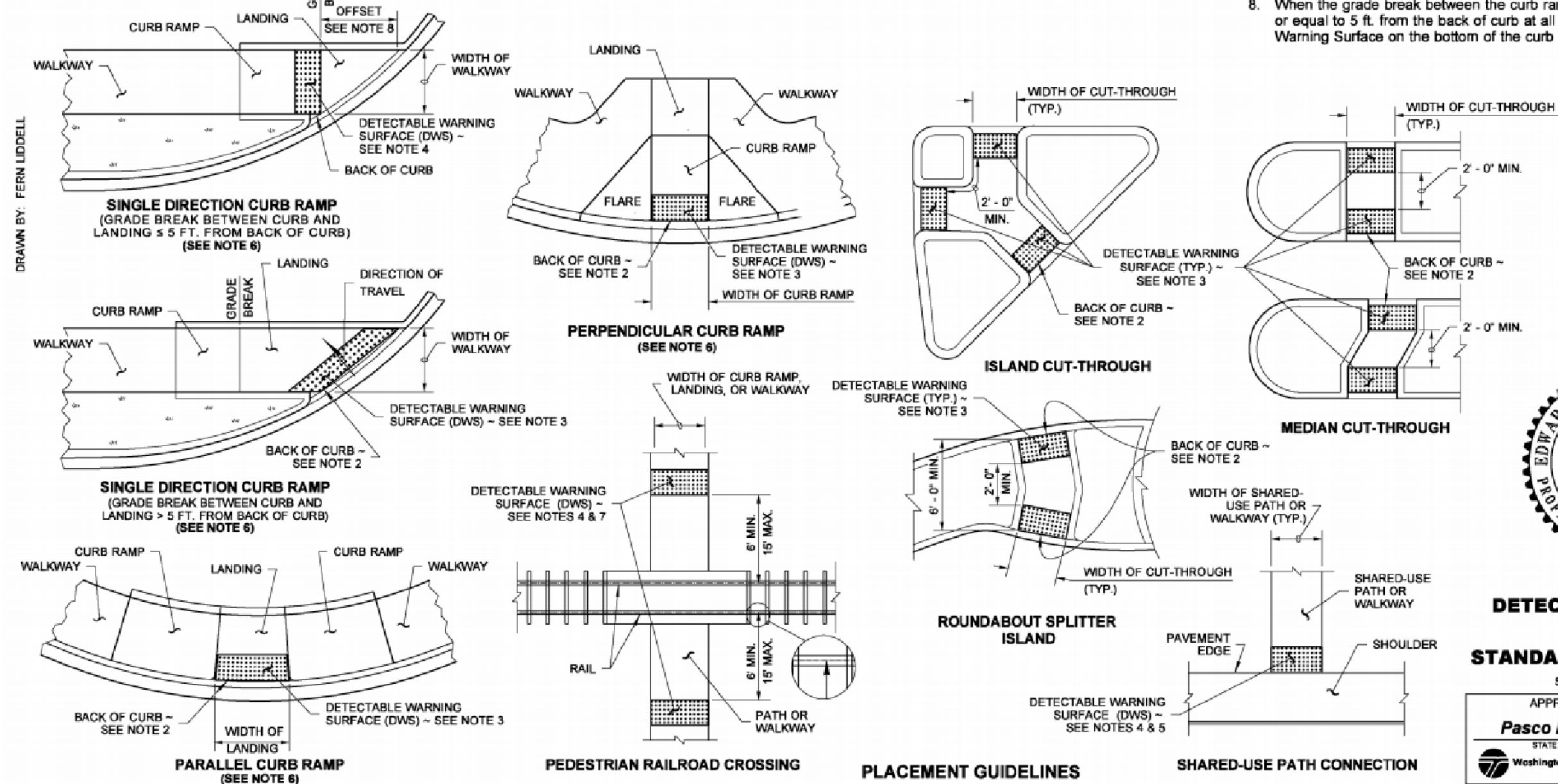
- 67 -



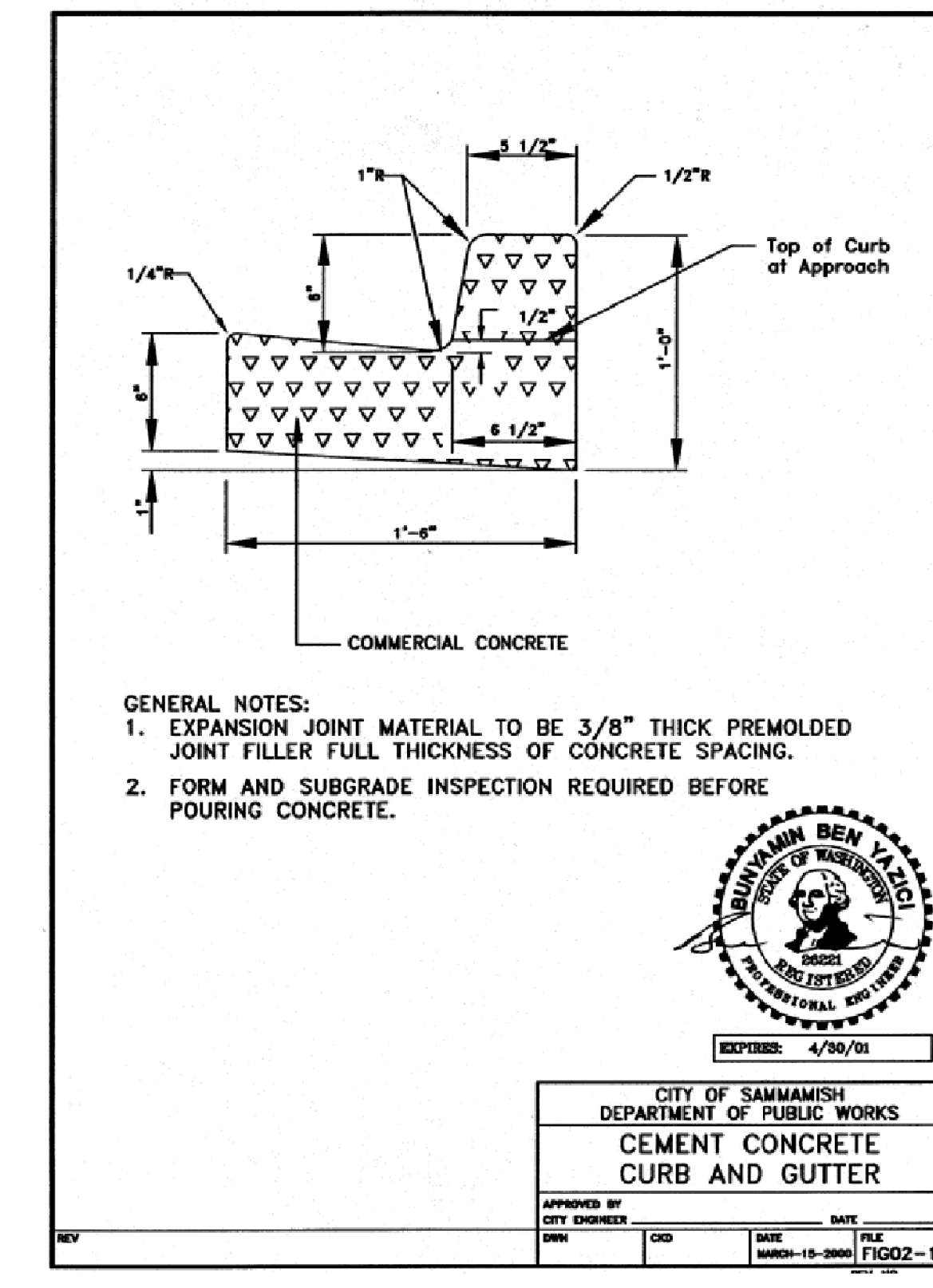
- 68 -

WSDOT STD. PLAN F-10.42-00 EXTRUDED CURB DETAILS:**NOTES**

- The Detectable Warning Surface (DWS) shall extend the full width of the curb ramp (exclusive of flares) or the landing.
- The Detectable Warning Surface shall be placed at the back of curb, and need not follow the radius.
- The rows of truncated domes shall be aligned to be perpendicular to the grade break at the back of curb.
- The rows of truncated domes shall be aligned to be parallel to the direction of travel.
- If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
- See **Standard Plans** for sidewalk and curb ramp details.
- If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail.
- When the grade break between the curb ramp and the landing is less than or equal to 5 ft. from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp.

**DETECTABLE WARNING SURFACE****STANDARD PLAN F-45.10-01**

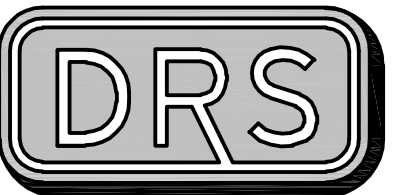
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Pasco Bakotich III 06/21/12
STATE DESIGN ENGINEER
Washington State Department of Transportation

CITY OF SAMMAMISH FIG02-09 & FIG02-10 SIDEWALK DETAILS:

- 69 -

WSDOT STD. PLAN F-45.10-01 DETECTABLE WARNING DETAILS:**CITY OF SAMMAMISH FIG02-14 CURB DETAILS:**

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O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

ROAD DETAILS

24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



APR MAJ MAJ MAJ

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DATE 06/13/17
CITY COMMENTS
07/12/17
CITY COMMENTS
11/11/19
AS-BUILT
10/26/20
AS-BUILT MYLARS

DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C16
SHEET: 16 OF 31

AS-BUILT NO. 17-0309



25 & 2627 242ND AVE
SAMMAMISH, WA

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



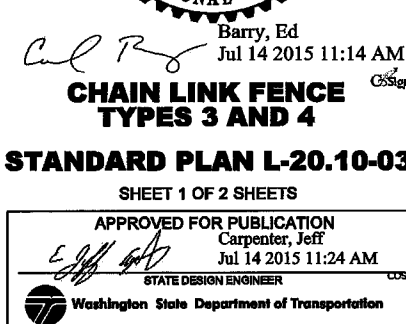
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- 73 -

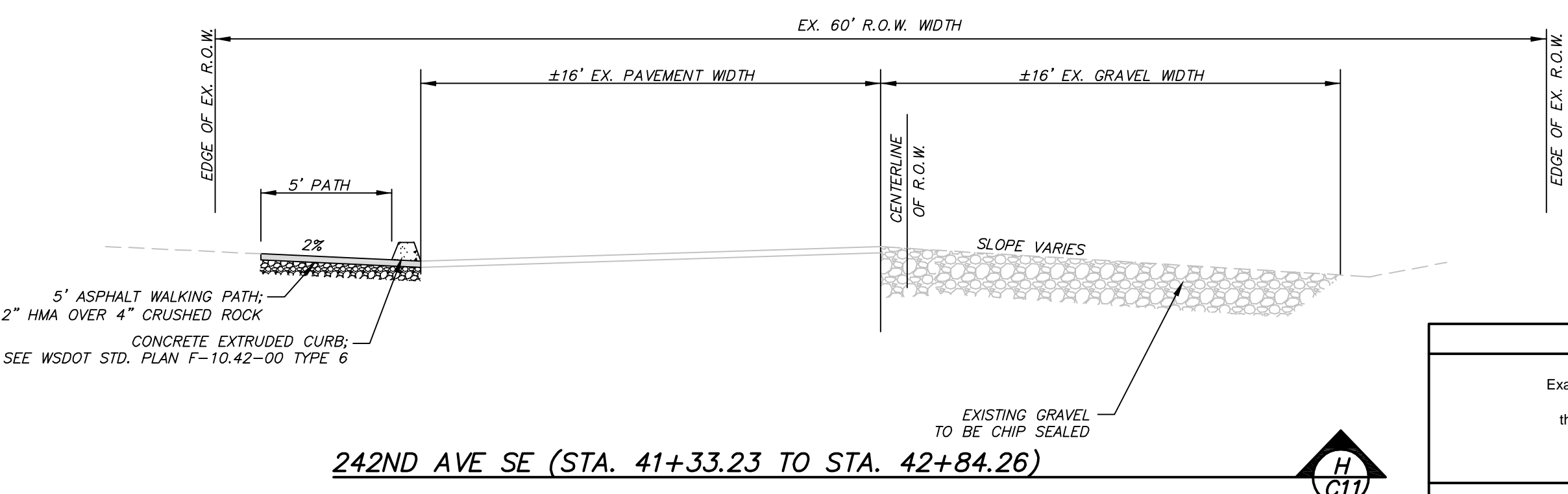
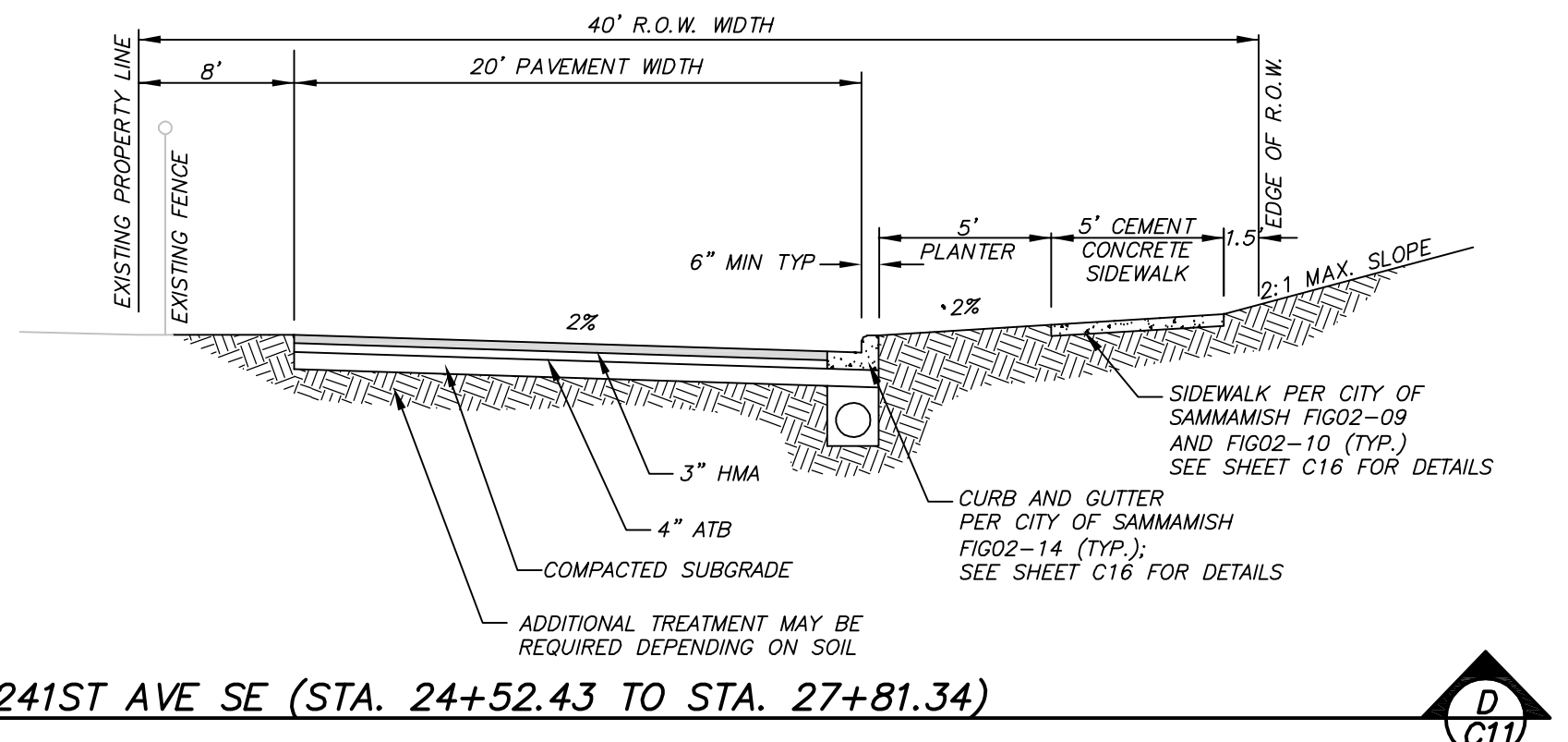
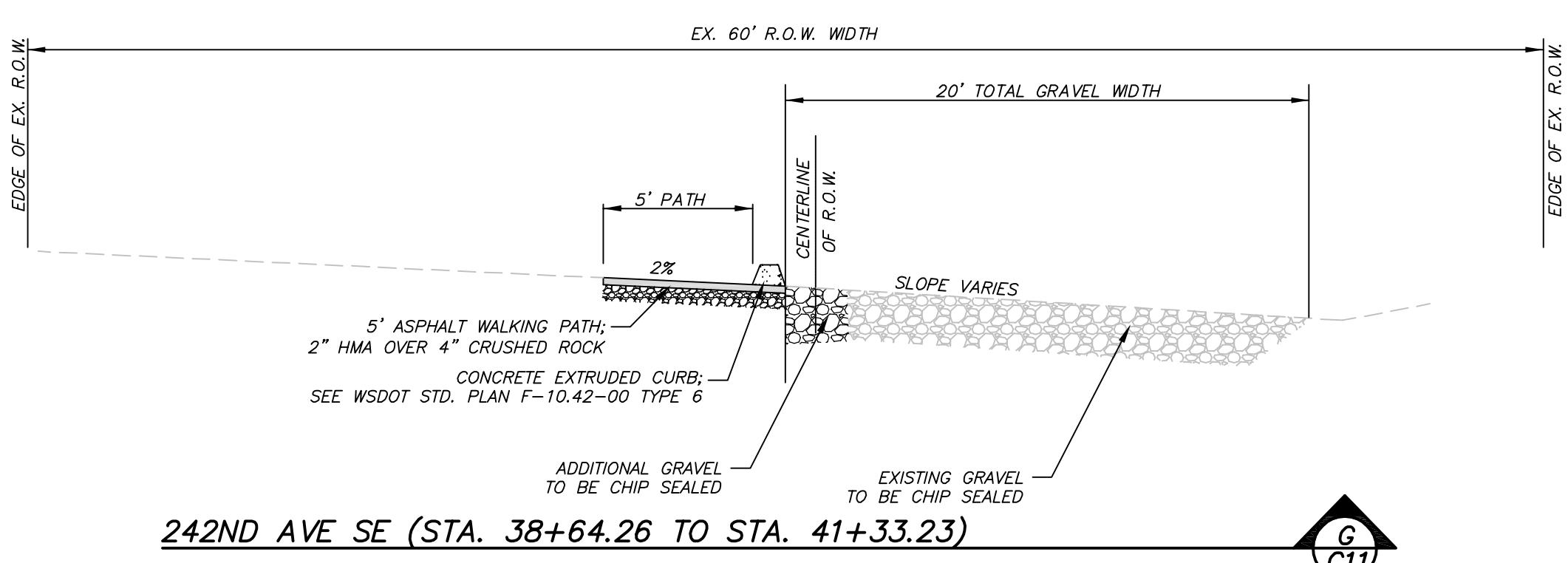
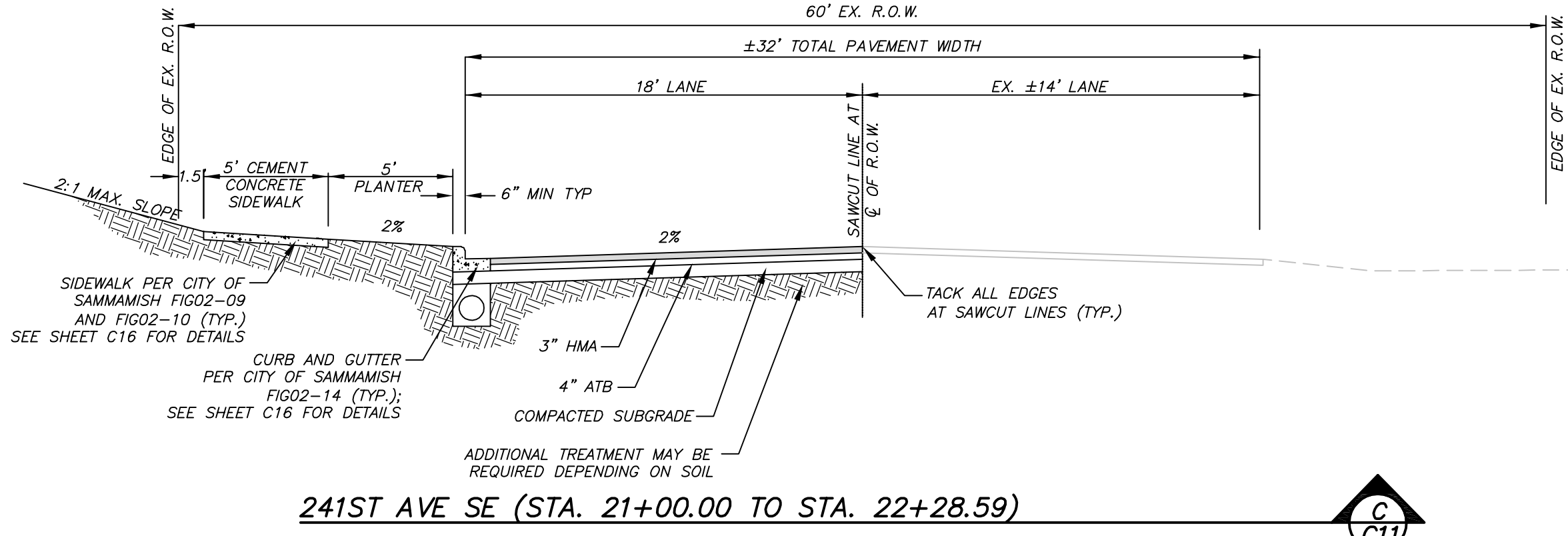
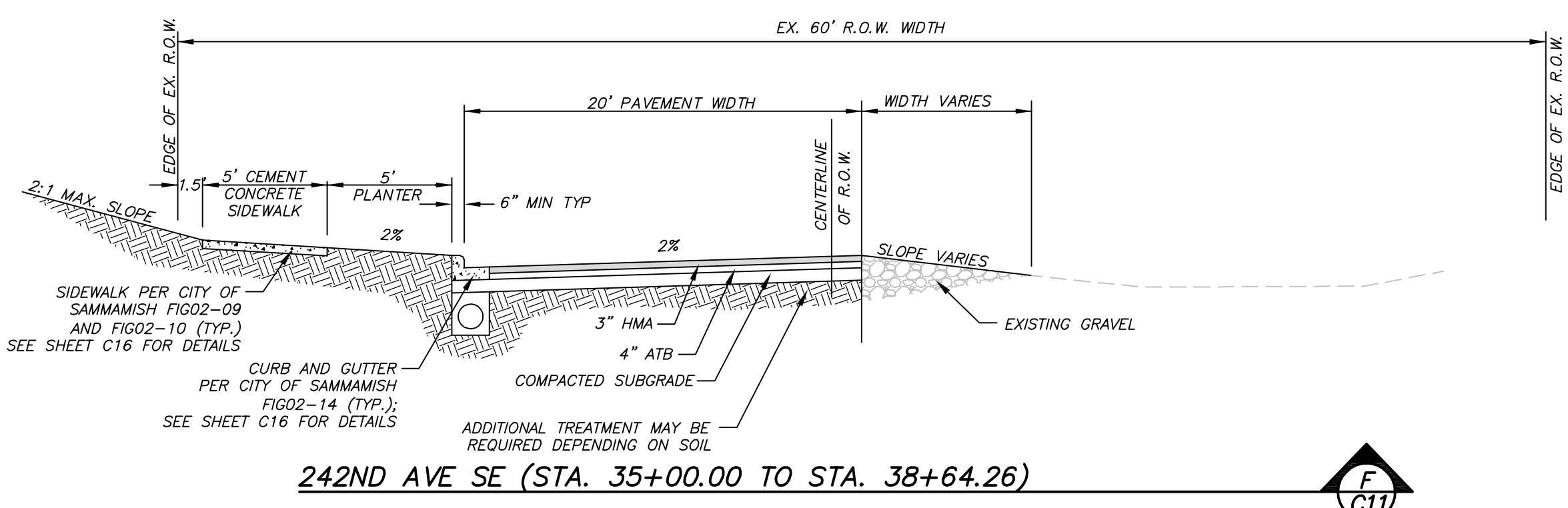
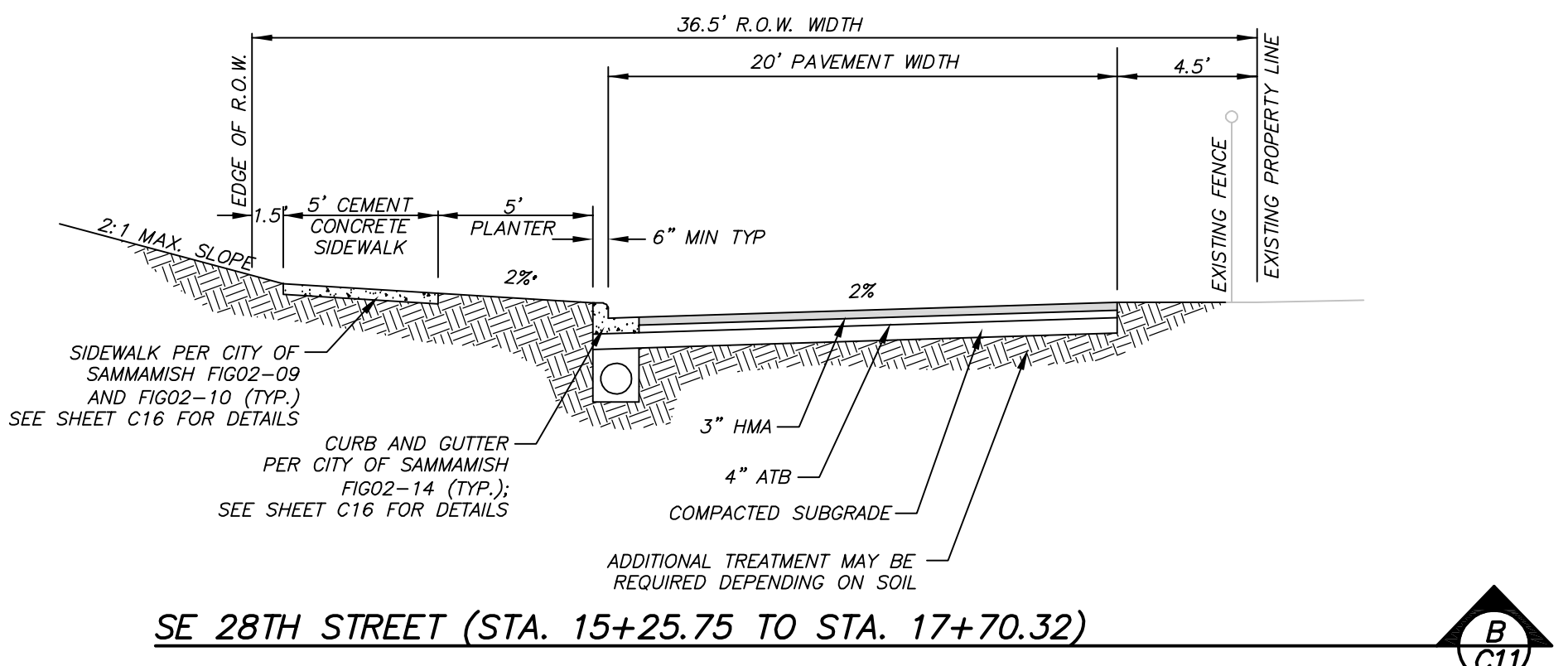
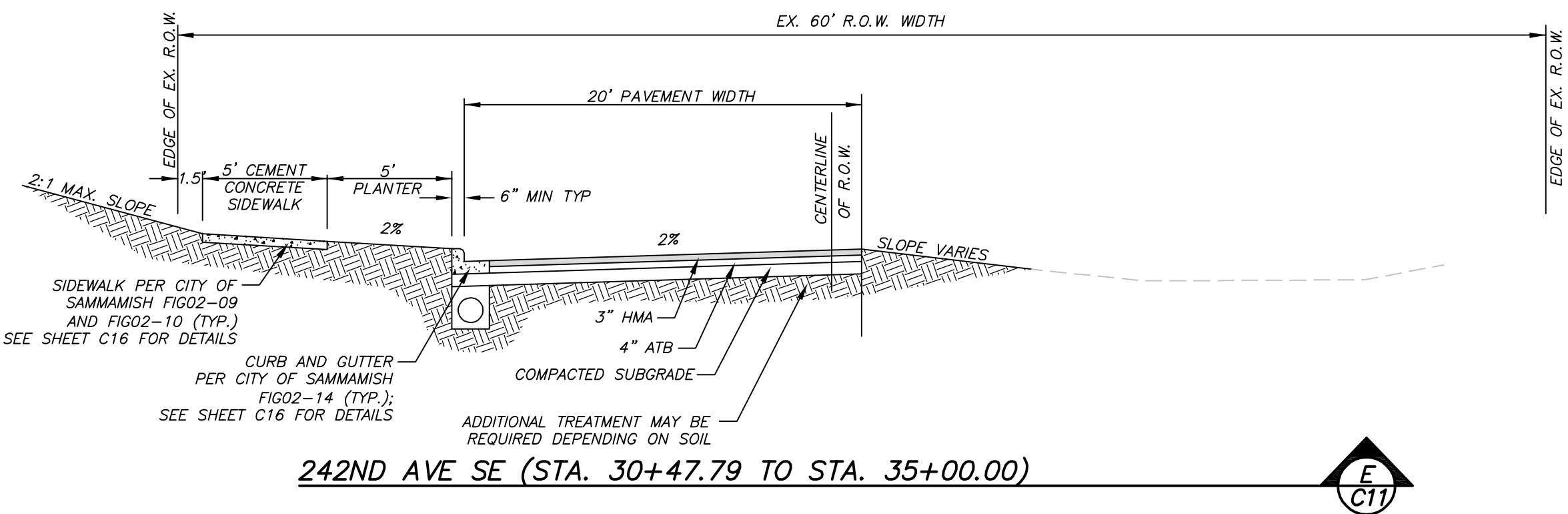
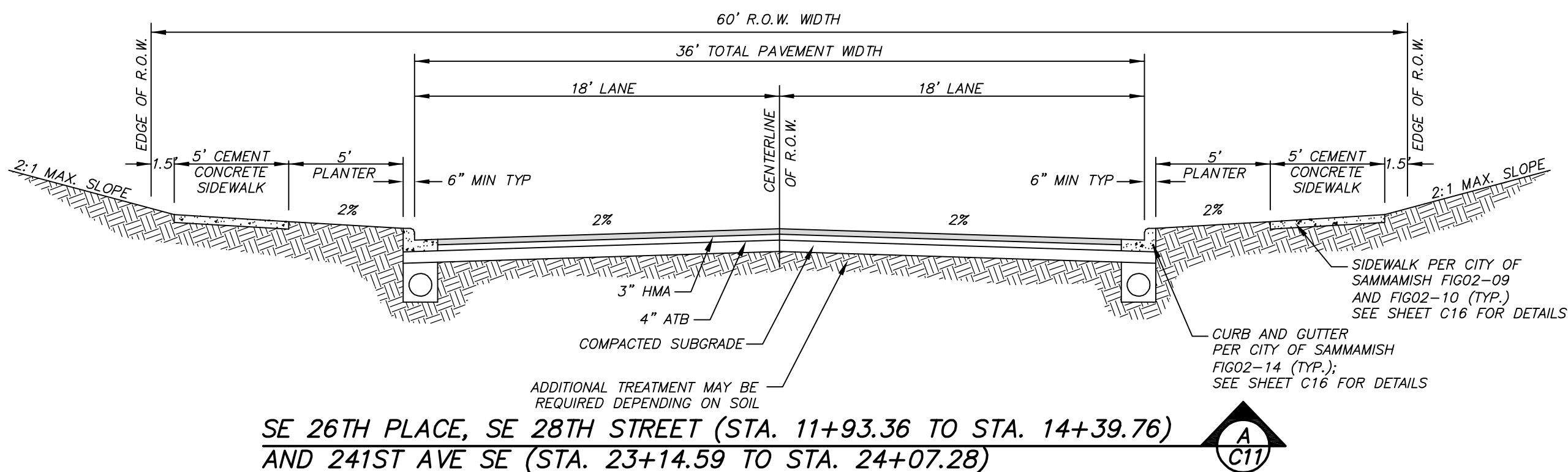
- 74

FIG. 5-018



- 70

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.
PENNY LANE SOUTH
SDP2017-00575



THESE PLANS ARE RECORD DRAWINGS AND THE INFORMATION SHOWN ACCURATELY REFLECTS EXISTING FIELD CONDITIONS AS OF 11/06/19.

AS-BUILT
NO AS-BUILT INFORMATION ON THIS SHEET.
Call 2 Working Days Before You Dig
811
Utilities Underground Location Center
(D.M.T.N.D. OR WA)

SUBDIVISION	
City of Sammamish Approval Examined and Approved per SMC 20.05 this _____ day of _____, 20____.	
City Planner	
Public Works Development Review Engineer	

D.R. STRONG CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

ROAD CROSS-SECTIONS

24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147

APR	MAJ	MAJ	MAJ
REVISION	CITY COMMENTS	CITY COMMENTS	AS-BUILT
DATE	06/13/17	07/12/17	11/11/19
			10/26/20

DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C18
SHEET: 18 OF 31

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



D.R. STRONG
CONSULTING ENGINEERS

ENGINEERS PLANNERS SURVEYORS

620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

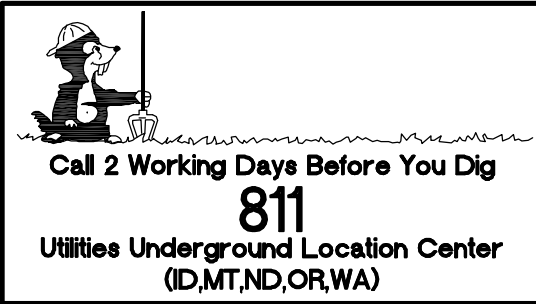
242ND AVE SE
ROAD AND STORM PROFILE
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

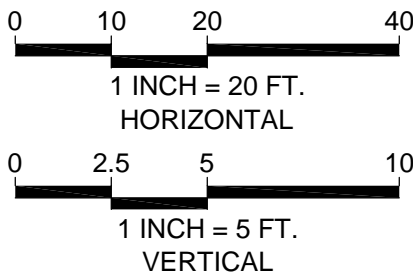
9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



AS-BUILT



THESE PLANS ARE RECORD DRAWINGS AND THE
INFORMATION SHOWN ACCURATELY REFLECTS
EXISTING FIELD CONDITIONS AS OF 11/06/19.



NOTES:

- ALL CATCH BASINS ARE VANED GRATES UNLESS OTHERWISE NOTED.
- ALL OFFSETS ARE TO CENTER OF STRUCTURE.
- BACKFILL OVER PIPES AND UTILITIES IN RIGHT-OF-WAY SHALL BE ¾" MINUS CRUSHED ROCK.

SEE SHEET C14 FOR STORM DRAINAGE PLAN VIEW

VERTICAL DATUM:

NAVD 88, PER KING COUNTY VERTICAL CONTROL

HORIZONTAL DATUM:

NAD 1983/91

UTILITY CROSSING NOTE:

(X) SEE SHEET C14 FOR UTILITY CROSSING TABLE

SUBDIVISION

City of Sammamish Approval
Examined and Approved per SMC 20.05
for SDP2017-00575
this _____ day of _____, 20____.

City Planner

Public Works Development Review Engineer

APR

MAJ

MAJ

MAJ

MAJ

DATE

06/13/17

REVISION

07/12/17

CITY COMMENTS

11/11/19

CITY COMMENTS

10/26/20

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

DRAWING: C19

SHEET: 19 OF 31

AS-BUILT NO. 17-0312

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.
PENNY LANE SOUTH
SDP2017-00575



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

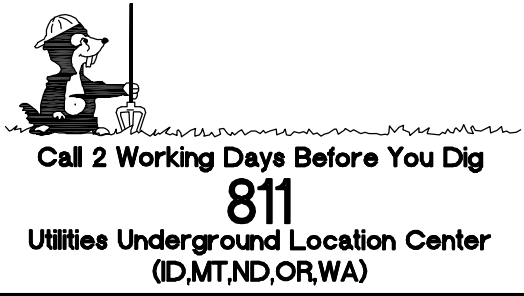
242ND AVE SE
ROAD AND STORM PROFILE
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

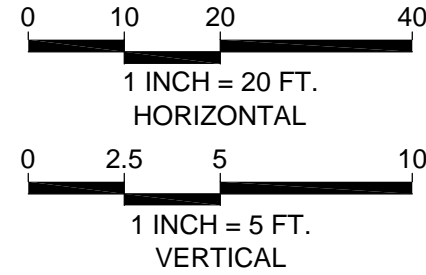
9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



AS-BUILT



THESE PLANS ARE RECORD DRAWINGS AND THE
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SEE SHEET C14 FOR STORM DRAINAGE PLAN VIEW

VERTICAL DATUM:
NAVD 88, PER KING COUNTY VERTICAL CONTROL
HORIZONTAL DATUM:
NAD 1983/91
UTILITY CROSSING NOTE:
(X) SEE SHEET C14 FOR UTILITY CROSSING TABLE

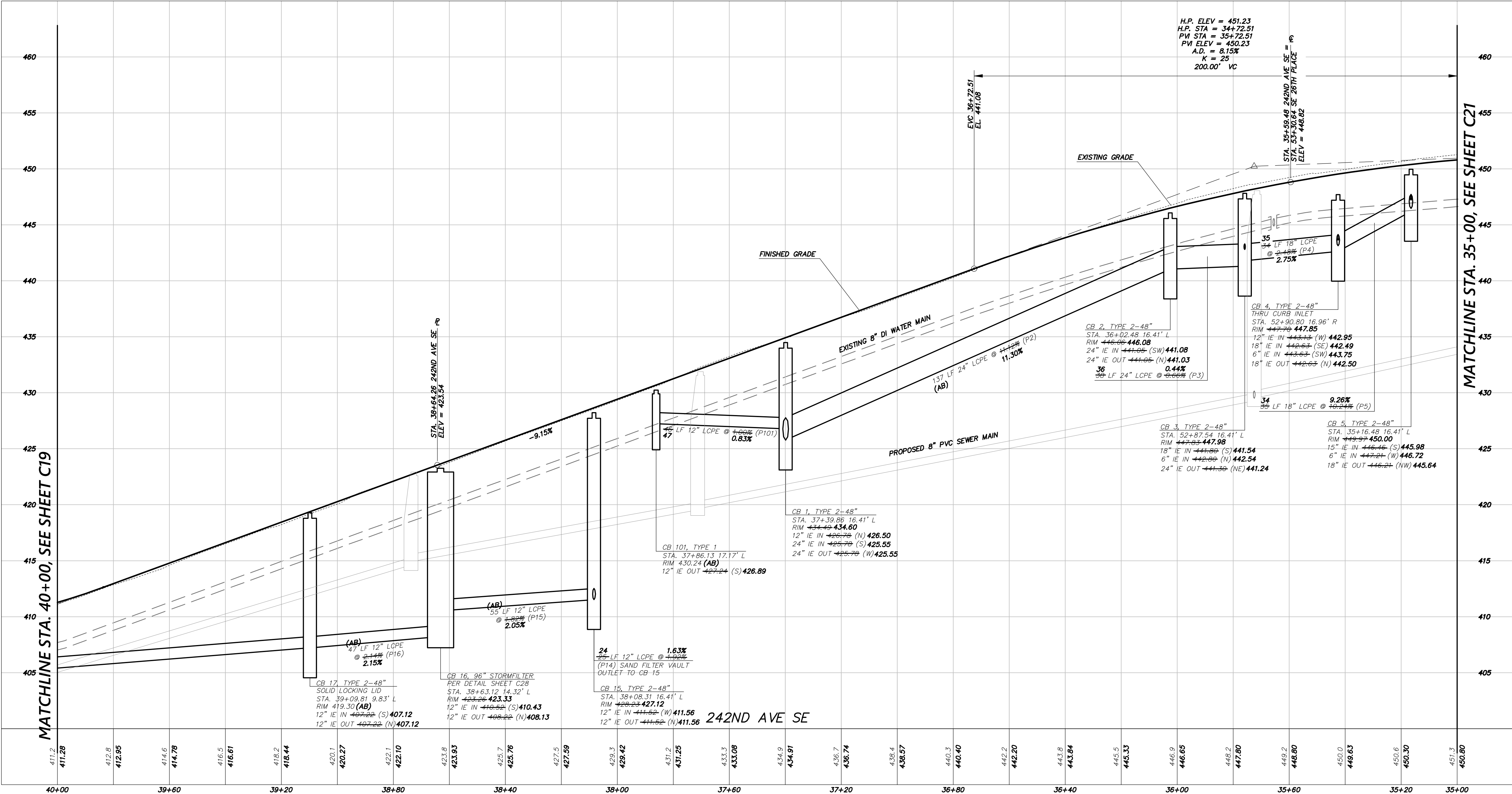
SUBDIVISION	
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this ____ day of _____, 20____.	
City Planner	
Public Works Development Review Engineer	

DATE	REVISION	CITY COMMENTS
06/13/17	MAJ	MAJ
07/12/17	MAJ	MAJ
11/11/19	MAJ	MAJ
10/26/20	MAJ	MAJ

DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C20
SHEET: 20 OF 31

AS-BUILT NO. 17-0313



NOTES:
1. ALL CATCH BASINS ARE VANED GRATES UNLESS OTHERWISE NOTED.
2. ALL OFFSETS ARE TO CENTER OF STRUCTURE.
3. BACKFILL OVER PIPES AND UTILITIES IN RIGHT-OF-WAY SHALL BE 3/4" MINUS CRUSHED ROCK.

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.
PENNY LANE SOUTH
SDP2017-00575



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

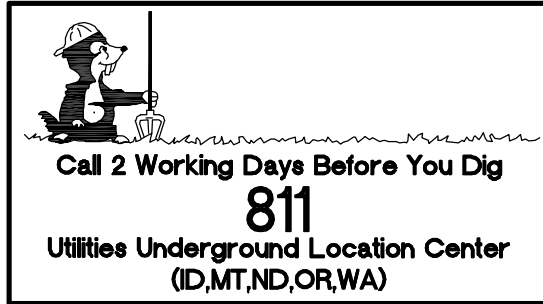
242ND AVE SE
ROAD AND STORM PROFILE
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

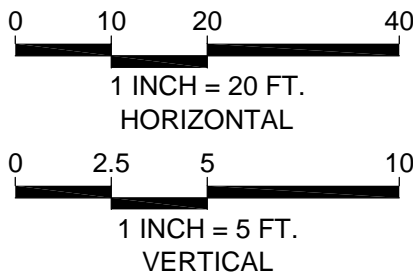
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(206) 588-1147



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VERTICAL DATUM:

NAVD 88, PER KING COUNTY VERTICAL CONTROL

HORIZONTAL DATUM:

NAD 1983/91

UTILITY CROSSING NOTE:

(X) SEE SHEET C14 FOR UTILITY CROSSING TABLE

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SUBDIVISION

City of Sammamish Approval
Examined and Approved per SMC 20.05
for SDP2017-00575
this ____ day of _____, 20____.

City Planner

Public Works Development Review Engineer

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

DRAWING: C21

SHEET: 21 OF 31

AS-BUILT NO. 17-0314

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



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PENNY LANE SOUTH

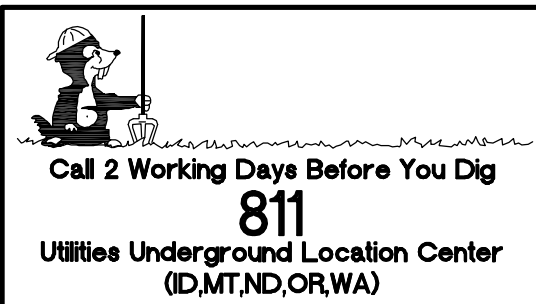
241ST AVE SE
ROAD AND STORM PROFILE
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

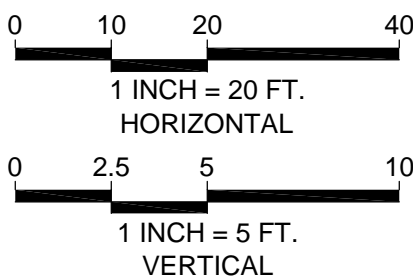
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VERTICAL DATUM:

NAVD 88, PER KING COUNTY VERTICAL CONTROL

HORIZONTAL DATUM:

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SUBDIVISION

City of Sammamish Approval
Examined and Approved per SMC 20.05
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this ____ day of _____, 20____.

City Planner

Public Works Development Review Engineer

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

DRAWING: C22

SHEET: 22 OF 31

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AS-BUILT NO. 17-0315

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



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PENNY LANE SOUTH

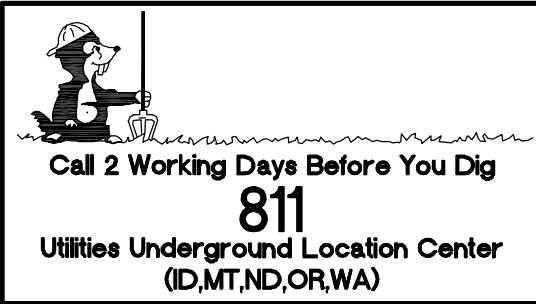
241ST AVE SE
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WOOD CROWN, LLC

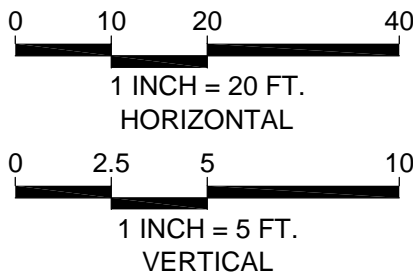
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THESE PLANS ARE RECORD DRAWINGS AND THE
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SEE SHEET C14 FOR STORM DRAINAGE PLAN VIEW

VERTICAL DATUM:

NAVD 88, PER KING COUNTY VERTICAL CONTROL

HORIZONTAL DATUM:

NAD 1983/91

UTILITY CROSSING NOTE:

(X) SEE SHEET C14 FOR UTILITY CROSSING TABLE

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APR
MAJ
MAJ
MAJ

REVISION
CITY COMMENTS
CITY COMMENTS
AS-BUILT
AS-BUILT
DATE
06.13.17
07.12.17
11.11.19
10.26.20

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

DRAWING: C23

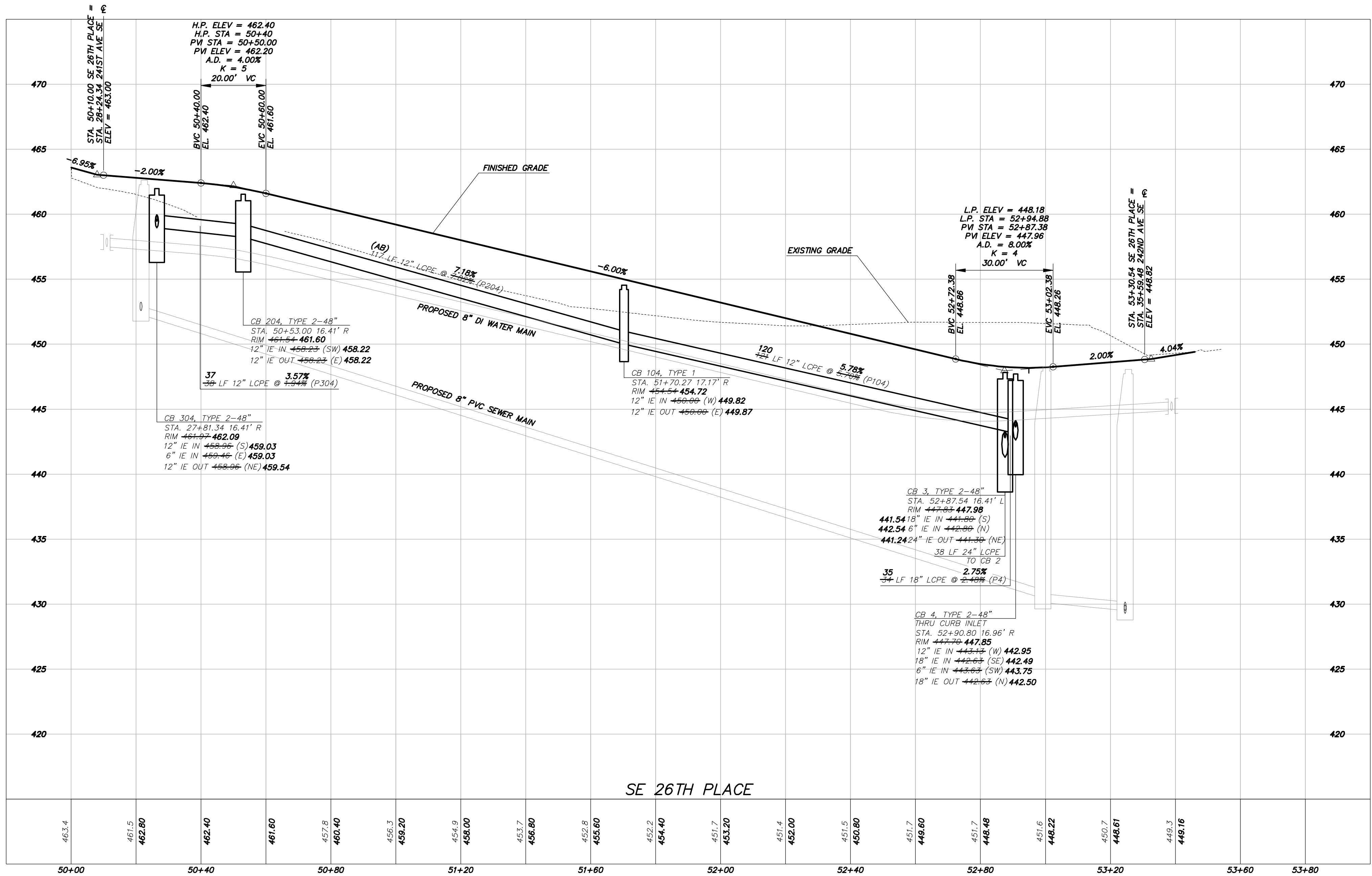
SHEET: 23 OF 31

AS-BUILT NO. 17-0316

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



SE 26TH PLACE

NOTES:

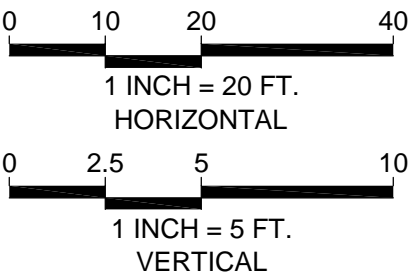
- ALL CATCH BASINS ARE VANED GRATES UNLESS OTHERWISE NOTED.
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VERTICAL DATUM:
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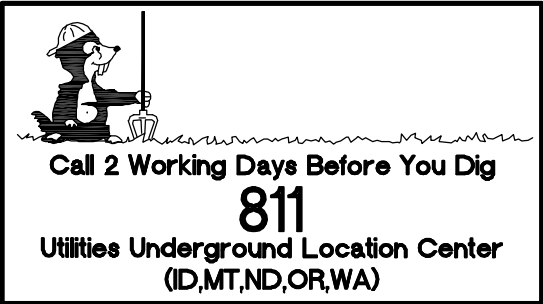
HORIZONTAL DATUM:
NAD 1983/91

UTILITY CROSSING NOTE:
(X) SEE SHEET C14 FOR UTILITY CROSSING TABLE



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AS-BUILT



SUBDIVISION	
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this _____ day of _____, 20____.	
City Planner	
Public Works Development Review Engineer	



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

SE 26TH PLACE
ROAD AND STORM PROFILE
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



DATE	REVISION	CITY COMMENTS
06/13/17	MAJ	
07/12/17	MAJ	
11/11/19	MAJ	
10/26/20	MAJ	

DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C24
SHEET: 24 OF 31

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575

DRS

D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

SE 28TH ST
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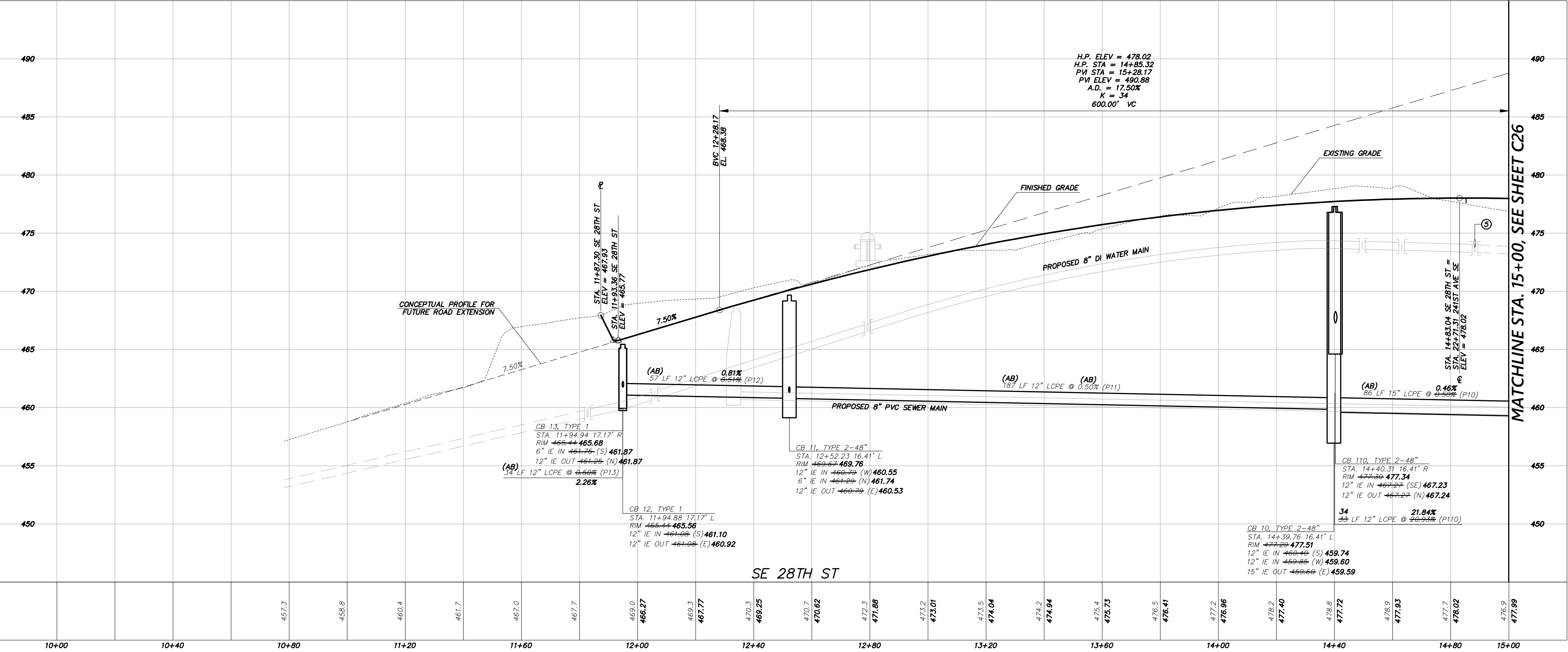
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REVISION
CITY COMMENTS
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DATE
06.13.17
07.12.17
11.11.19
10.26.20

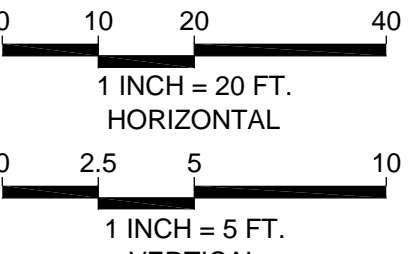
DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C25
SHEET: 25 OF 31



- NOTES:
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VERTICAL DATUM:
NAVD 88, PER KING COUNTY VERTICAL CONTROL

HORIZONTAL DATUM:
NAD 1983/91

UTILITY CROSSING NOTE:
(X) SEE SHEET C14 FOR UTILITY CROSSING TABLE

AS-BUILT

Call 2 Working Days Before You Dig
811
Utilities Underground Location Center
(D.M.T.N.D.OR.WA)

SUBDIVISION
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this ____ day of _____, 20____.
City Planner
Public Works Development Review Engineer

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



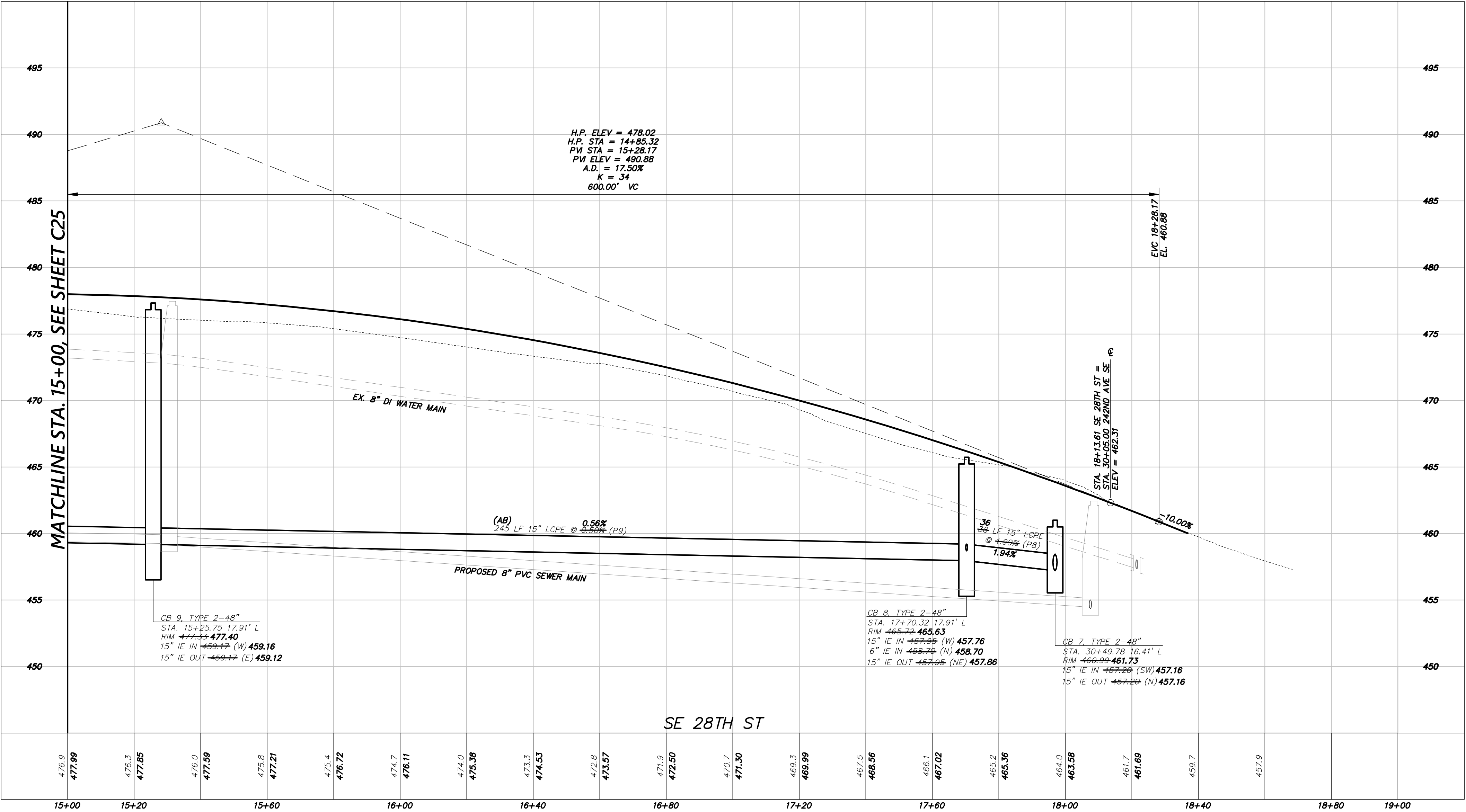
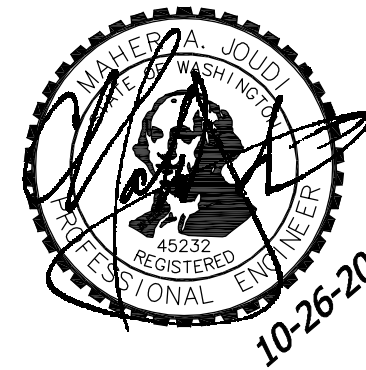
D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

SE 28TH ST
ROAD AND STORM PROFILE
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

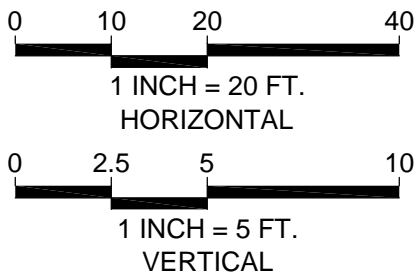
WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
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SE 28TH ST

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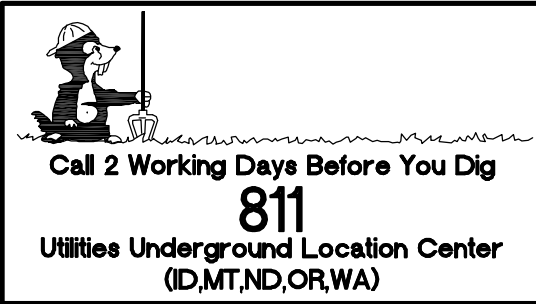
HORIZONTAL DATUM:

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SUBDIVISION

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DATE	REVISION	CITY COMMENTS
06/13/17	APR	MAJ
07/12/17	MAJ	MAJ
11/11/19	MAJ	MAJ
10/26/20	MAJ	MAJ

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

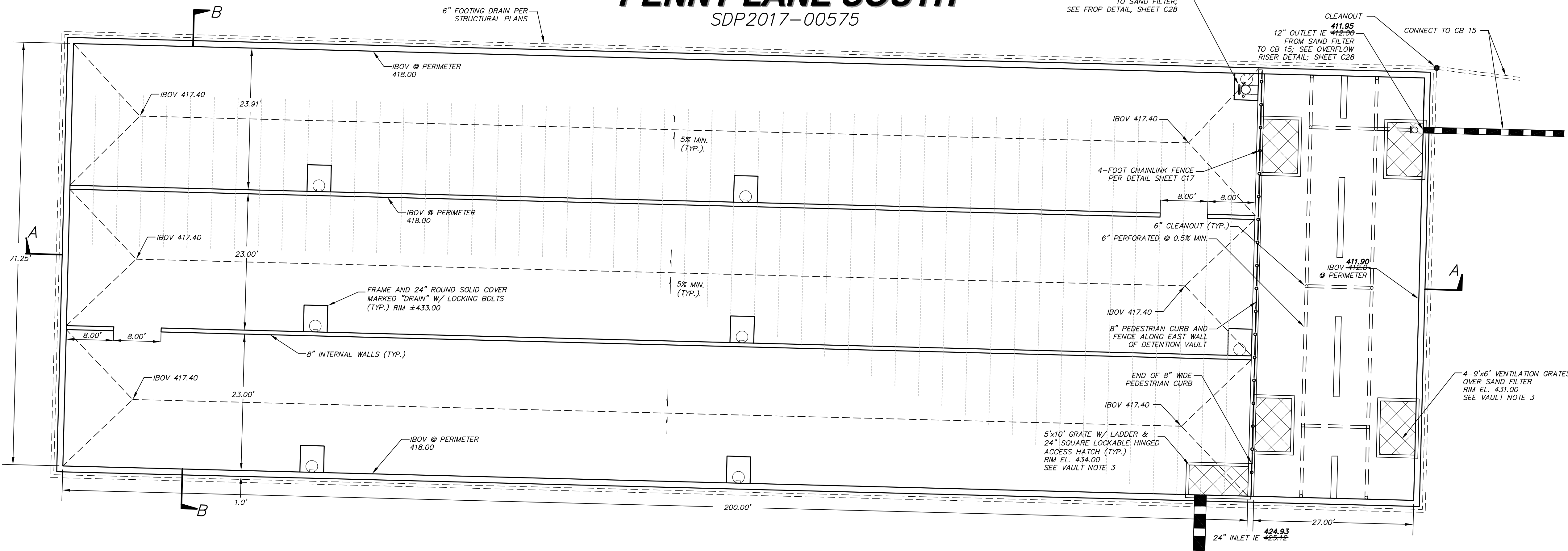
DRAWING: C26

SHEET: 26 OF 31

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

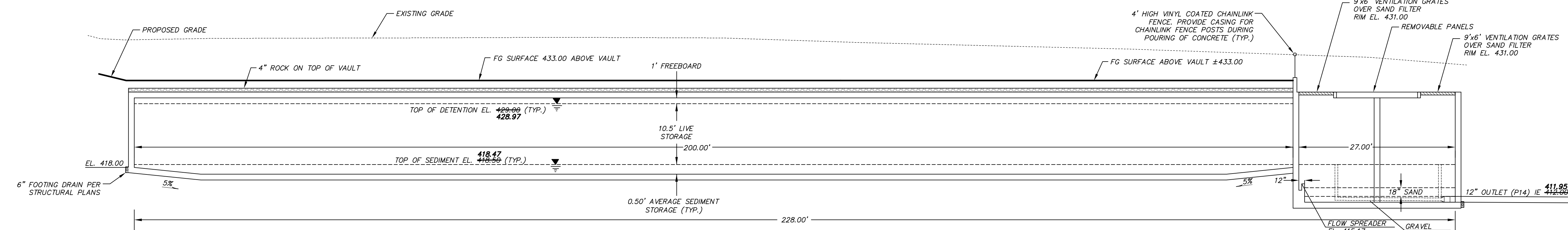
PENNY LANE SOUTH

SDP2017-00575



PLAN VIEW

SCALE 1"=10'



SECTION A-A

SCALE 1"=10'

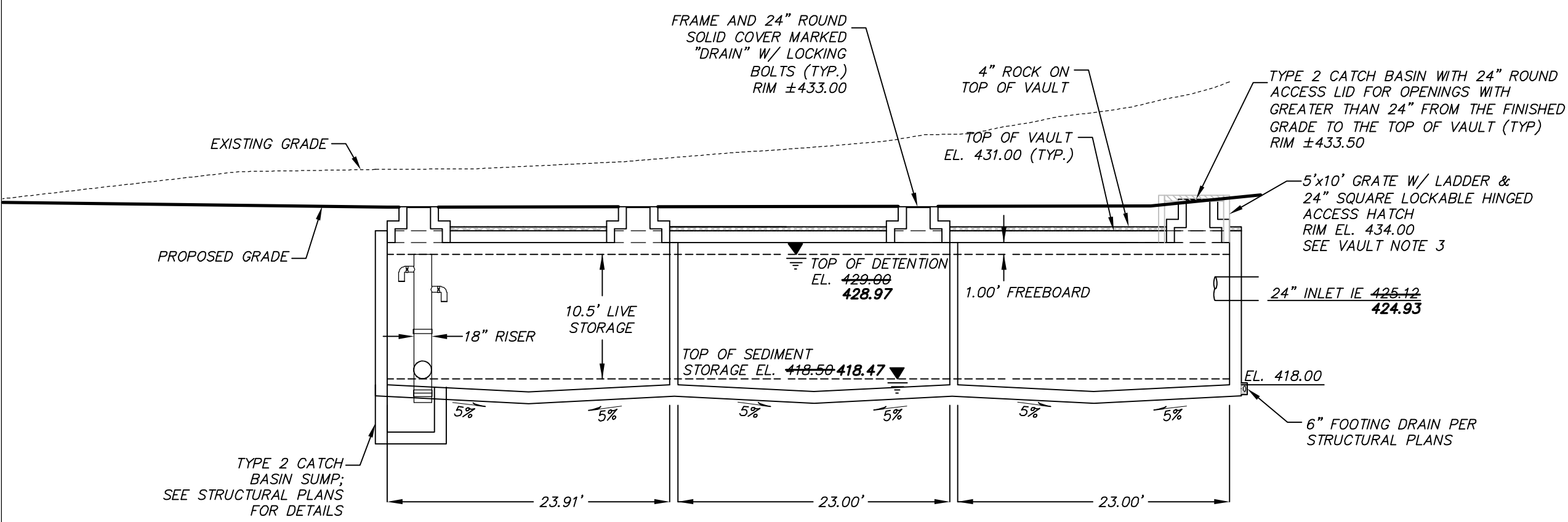
AS-BUILT



Call 2 Working Days Before You Dig
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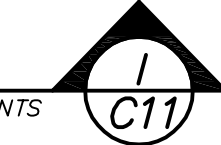
SUBDIVISION	
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City Planner	
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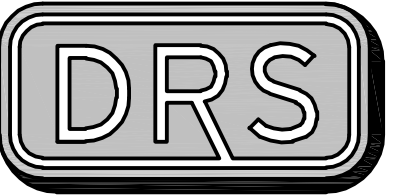
SECTION B-B

SCALE 1"=10'

VAULT ACCESS ROAD



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O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

VAULT CROSS SECTION
AND DETAILS
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



DATE	REVISION	CITY COMMENTS
06.13.17	MAJ	
07.12.17	MAJ	
11.11.19	MAJ	
10.26.20	MAJ	

DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

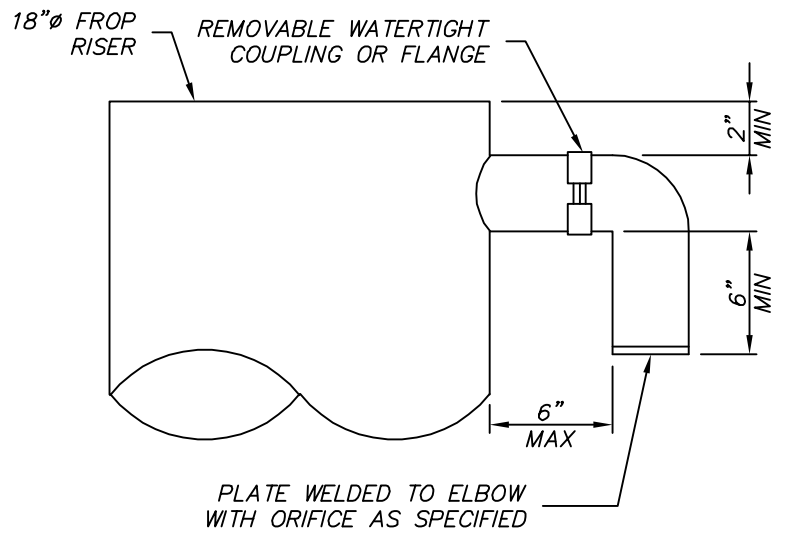
DRAWING: C27
SHEET: 27 OF 31

AS-BUILT NO. 17-0320

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.

PENNY LANE SOUTH

SDP2017-00575



ELBOW RESTRICTOR DETAIL

NTS

VAULT NOTES:

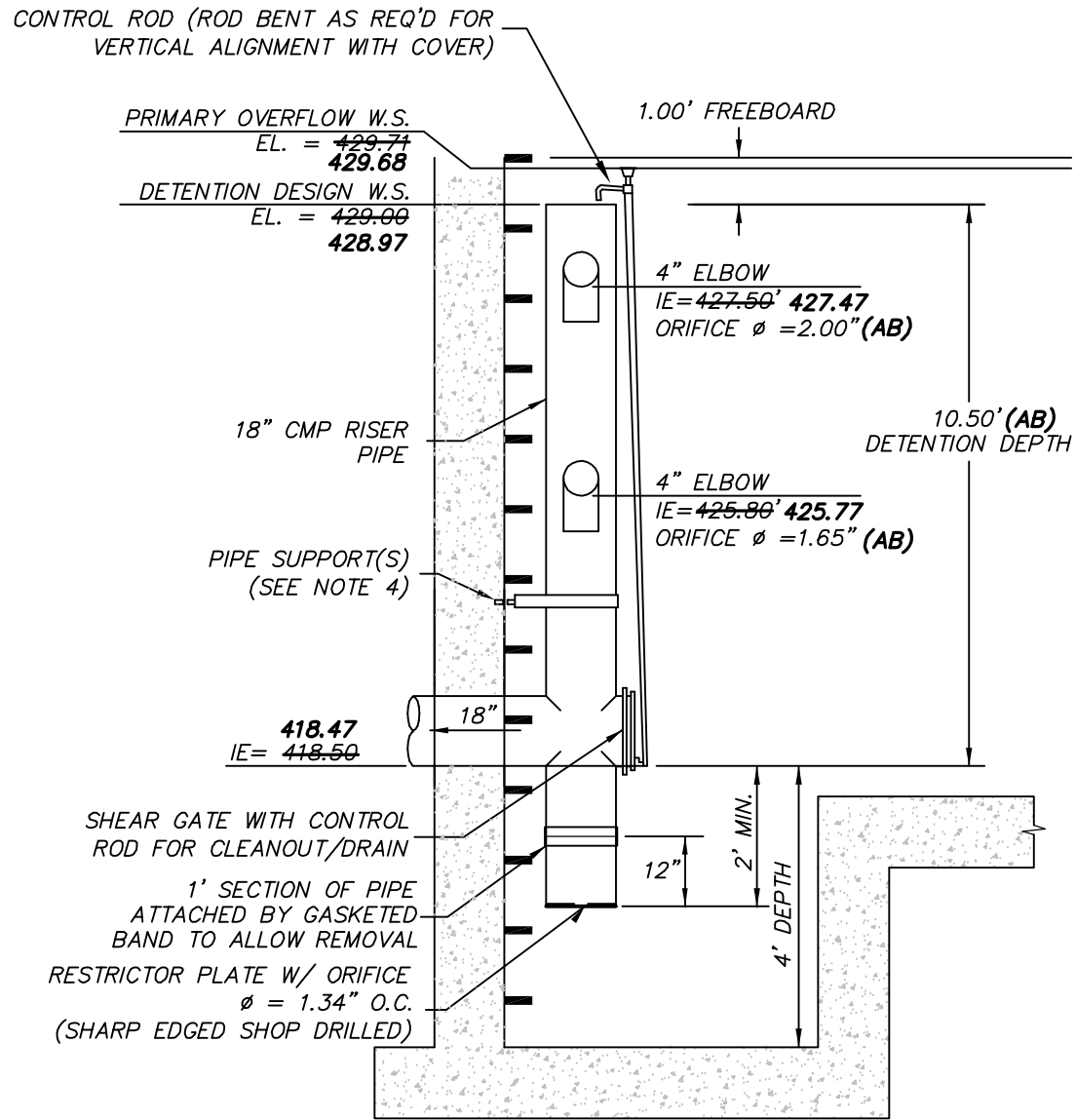
- ACCESS OPENINGS SHALL BE POSITIONED A MAX. OF 50 FT FROM ANY LOCATION WITHIN THE VAULT, AND AT THE INLET AND OUTLET.
- IBOV = INSIDE BOTTOM OF VAULT ELEVATION.

FROP NOTES:

- OUTLET CAPACITY: 100-YR PEAK FLOW
- METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT I.
- IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE: OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4"
- PROVIDE AT LEAST ONE 3"X.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL. (MAXIMUM 3' VERTICAL SPACING)
- LOCATE ELBOW RESTRICTOR(S) AS NECESSARY TO PROVIDE MINIMUM CLEARANCE AS SHOWN.

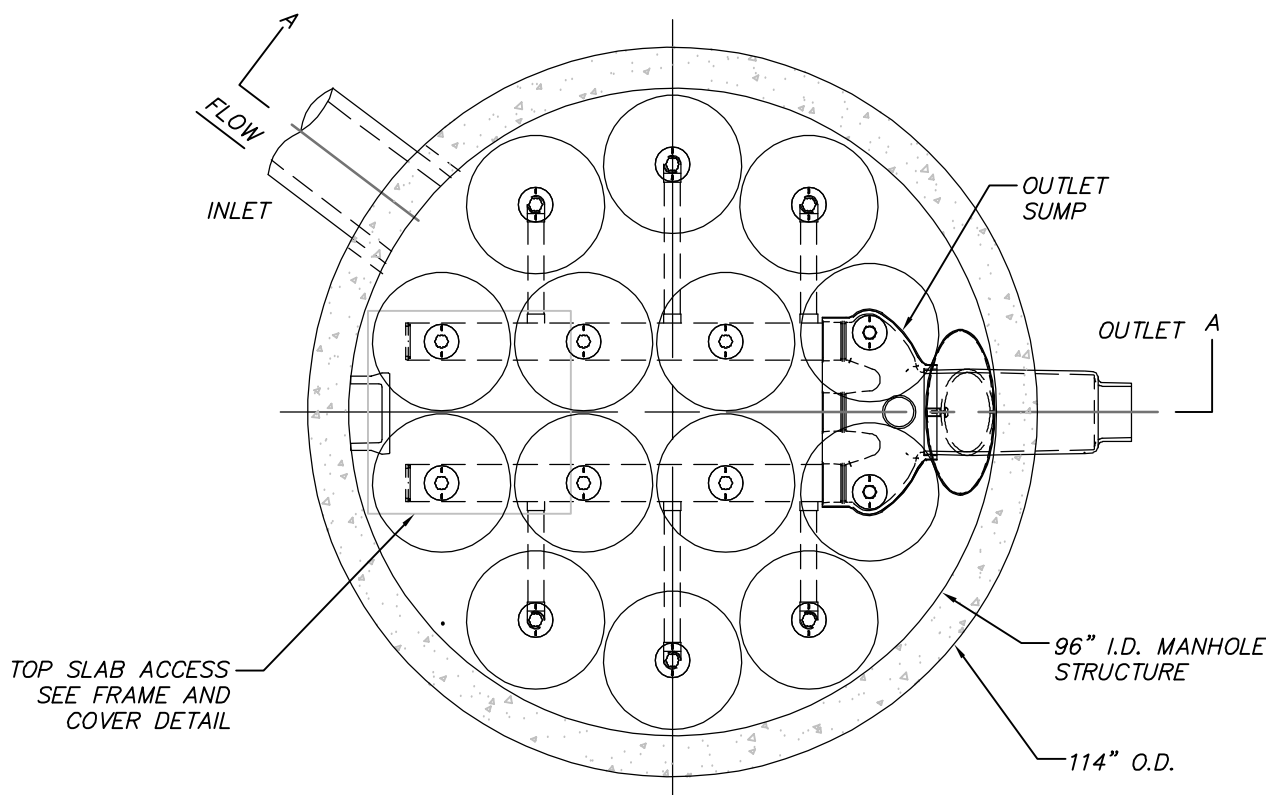
DETENTION SUMMARY SHEET

STAGE	STAGE	LIVE STORAGE VOLUME (CF)		
STORM	EL.	REQUIRED	PROVIDED	AS-BUILT
TOTAL	429.00	146,512	147,015	147,640
100 YEAR	429.32	150,849	151,496	152,140
25 YEAR	429.02	146,750	147,296	147,922
10 YEAR	429.00	146,576	147,015	147,640
2 YEAR	422.10	50,214	50,405	50,620



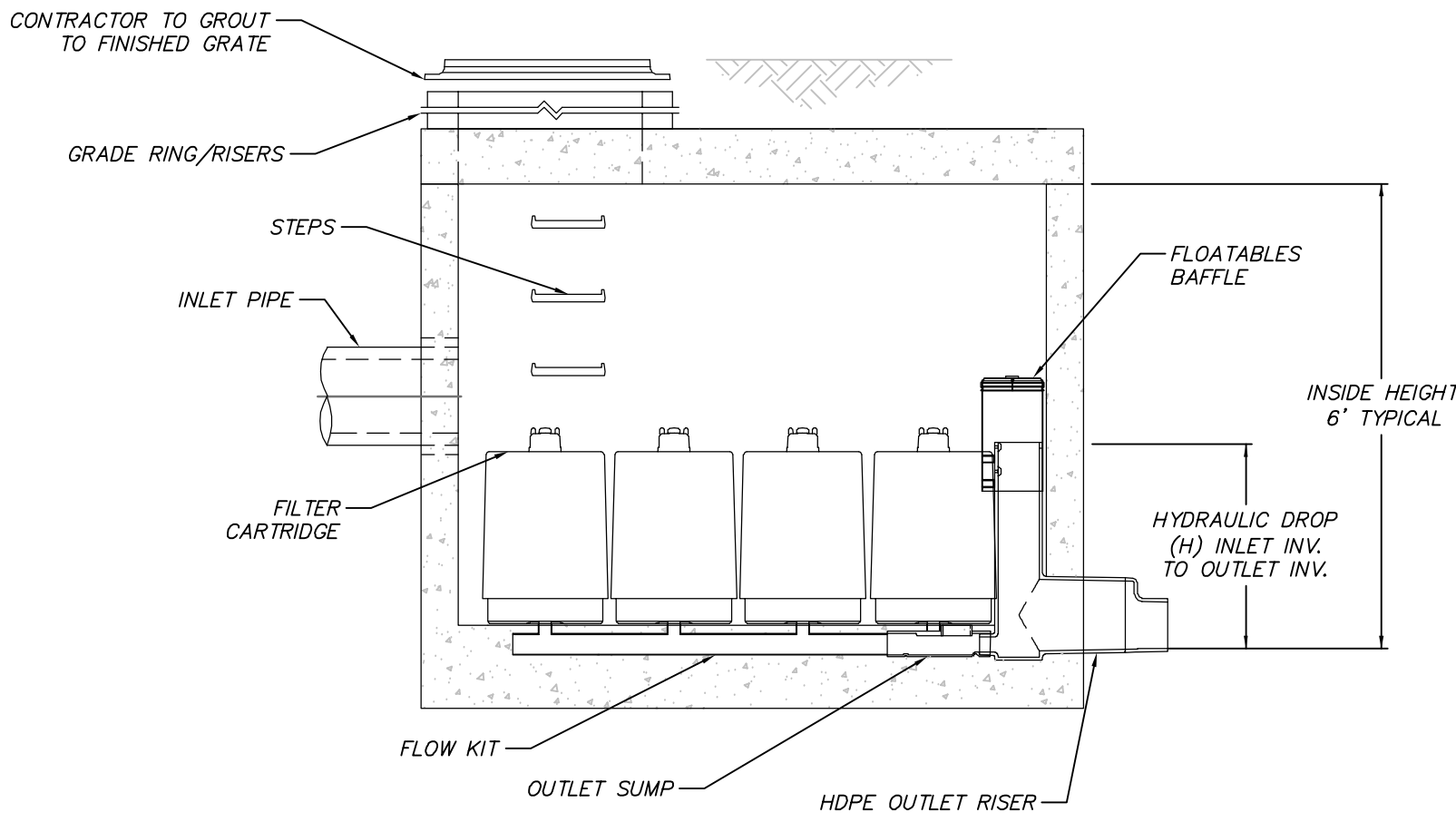
FROP DETAIL

NTS



PLAN VIEW

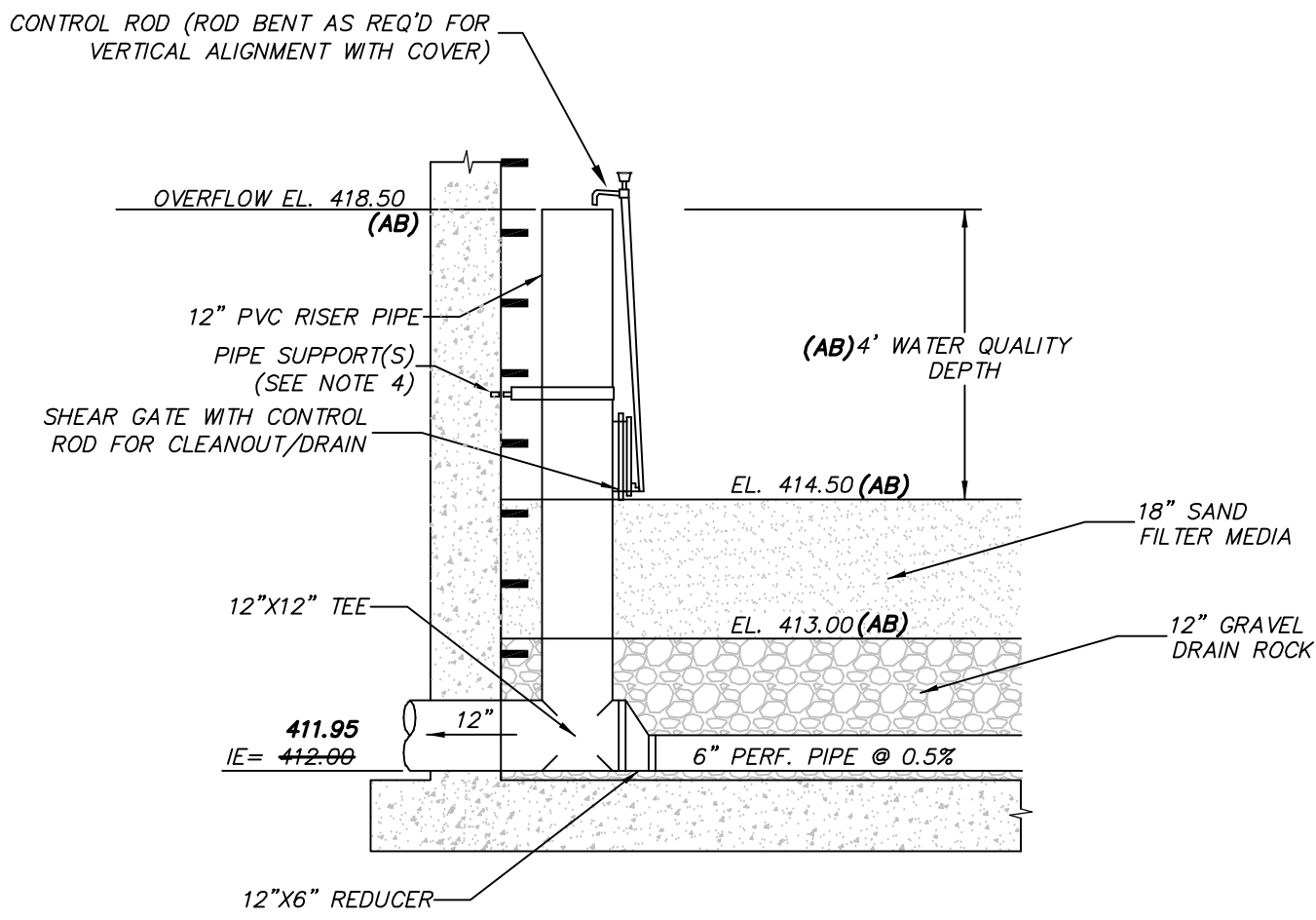
STANDARD OUTLET RISER
FLOWKIT: 4.3A



SECTION A-A

STORMFILTER DETAIL

NTS



OVERFLOW RISER DETAIL

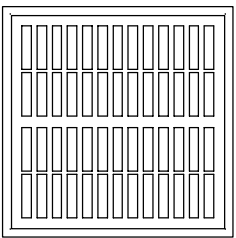
NTS

STORMFILTER DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (14). VOLUME SYSTEM IS ALSO AVAILABLE WITH MAXIMUM 14 CARTRIDGES. 696" MANHOLE STORMFILTER PEAK HYDRAULIC CAPACITY IS 1.8 CFS. IF THE SITE CONDITIONS EXCEED 1.8 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	LOW DROP
CARTRIDGE HEIGHT	2.05'	2.3'	1.6'
RECOMMENDED HYDRAULIC DROP (H)	2.05'	2.3'	1.6'
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf	1.67 gpm/sf	1 gpm/sf
CARTRIDGE FLOW RATE (gpm)	2.05	18.79	11.24

* 1.67 gpm/sf SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY



30" FRAME AND GRATE

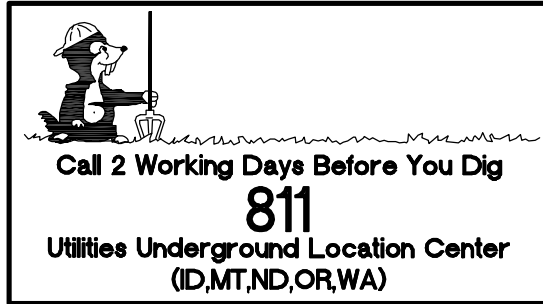
(ALSO AVAILABLE IN ROUND)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS		
STRUCTURE ID	16	
WATER QUALITY FLOW RATE (cfs)	0.213	
PEAK FLOW RATE (cfs)	0.575	
RETURN PERIOD OF PEAK FLOW (yrs)	25	
CARTRIDGE HEIGHT (27", 18", LOW DROP(D))	18'	
NUMBER OF CARTRIDGES REQUIRED	14	
CARTRIDGE FLOW RATE	7.5	
MEDIA TYPE (PERLITE, ZPG, PSORB)	CSF	
PIPE DATA:	I.E.	MATERIAL
INLET PIPE #1	410.43	LCPE
INLET PIPE #2	-	-
OUTLET PIPE	408.13	LCPE
RIM ELEVATION	423.33	
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
NOTES/SPECIAL REQUIREMENTS:		
* PER ENGINEER OF RECORD		

- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
 - STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M198 AND BE CAST WITH THE CONTECH LOGO.
 - FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
 - SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

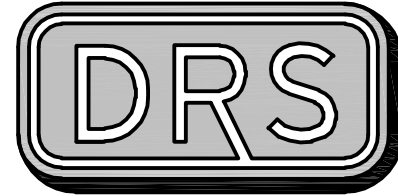
- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPE(S).
 - CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. IF OUTLET PIPE IS LARGER THAN 8 INCHES, CONTRACTOR TO REMOVE THE 8 INCH OUTLET STUB AT MOLDED IN CUT LINE. COUPLING BY FERNCO OR EQUAL AND PROVIDED BY CONTRACTOR.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

AS-BUILT



SUBDIVISION
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this ____ day of _____, 20____.
City Planner
Public Works Development Review Engineer

R:\2015\0\15065\3\Drawings\As-builts\Plots\AB_27,28-3VL15065.dwg 12/17/2019 11:56:45 AM
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D.R. STRONG
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ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

VAULT CROSS SECTION
AND DETAILS
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



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MAJ
MAJ
MAJ

REVISION
CITY COMMENTS
CITY COMMENTS
AS-BUILT
AS-BUILT
DATE
06/13/17
07/12/17
11/11/19
10/26/20

DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C28
SHEET: 28 OF 31

AS-BUILT NO. 17-0321

SDP2017-00575

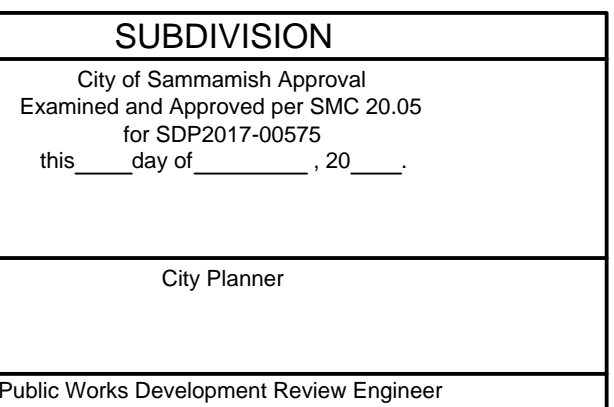


PRIVATE YARD DRAIN WITH SUMP SHALL BE INSTALLED BETWEEN ROOF DRAINS AND DRYWELL PER DETAIL THIS SHEET. CONNECTION BETWEEN YARD DRAIN AND DRYWELL TO BE MADE AT A 2% SLOPE. OVERFLOW OUTLET PIPE SHALL CONNECT TO LOT STORM STUBS OR CATCH BASINS AS SHOWN.



THESE PLANS ARE RECORD DRAWINGS AND THE
INFORMATION SHOWN ACCURATELY REFLECTS
EXISTING FIELD CONDITIONS AS OF 11/06/19.

NO AS-BUILT INFORMATION ON THIS SHEET.



620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

STORM DRAINAGE DETAILS

24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



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DATE	REVISION
06.13.17	CITY COMMENTS
07.12.17	CITY COMMENTS
11.11.19	AS-BUILT
10.26.20	AS-BUILT T. MYIARS

DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.15.17

PROJECT NO.: 15065

DRAWING: **C30**

SHEET: **30** OF **31**

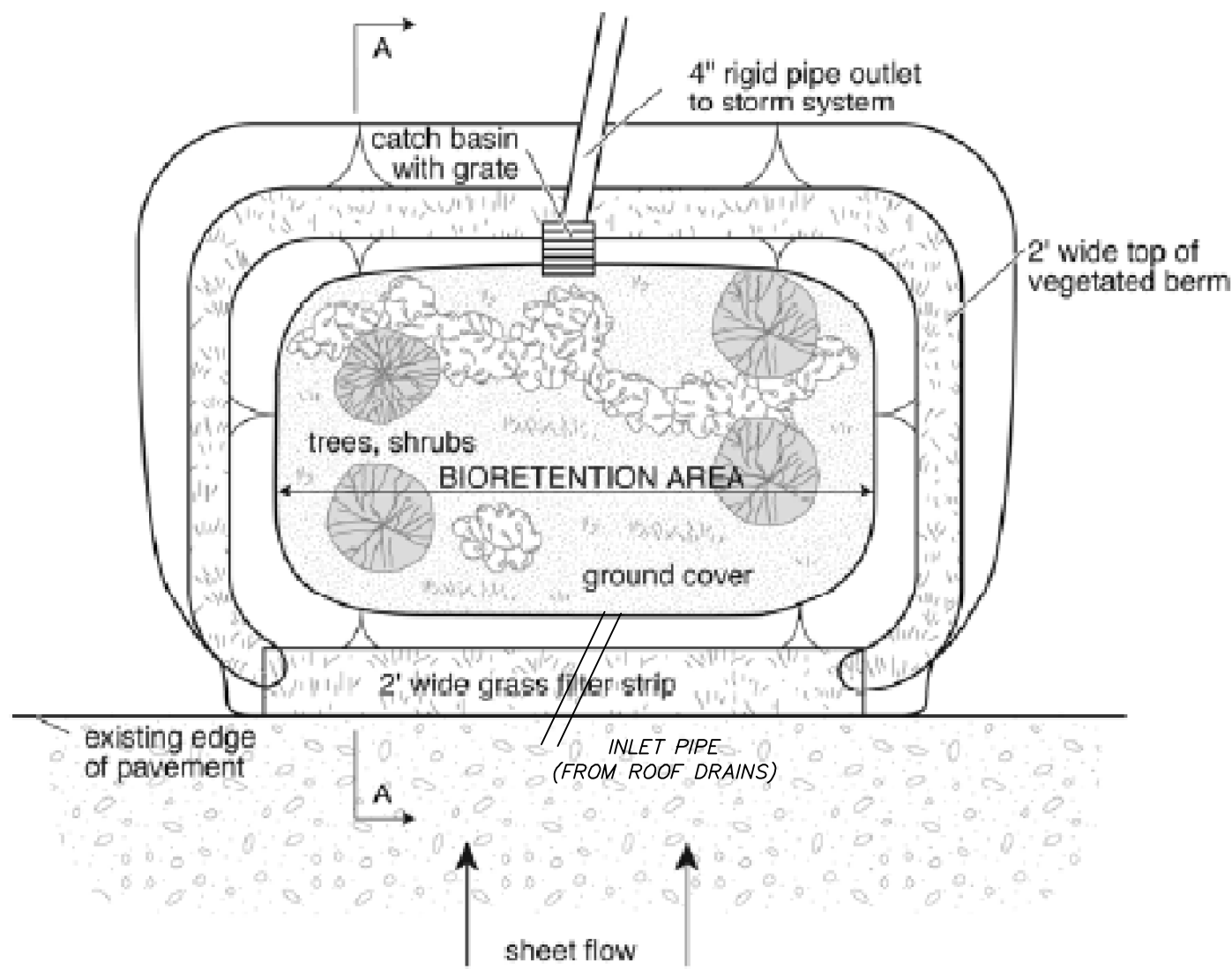
AS-BUILT NO. 17-0323

PENNY LANE SOUTH

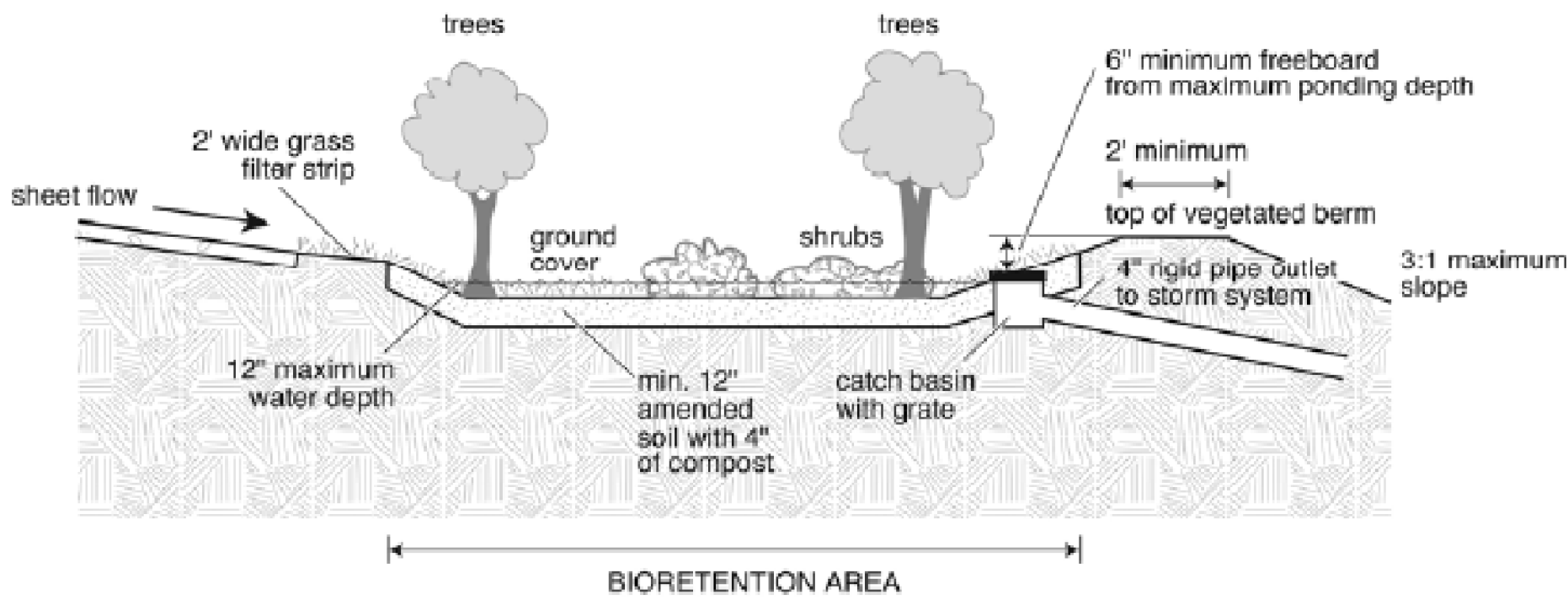
SDP2017-00575

RAIN GARDEN NOTES:

FIGURE C.2.5.B TYPICAL RAIN GARDEN WITH CONTAINMENT BERM



PLAN VIEW (not to scale)



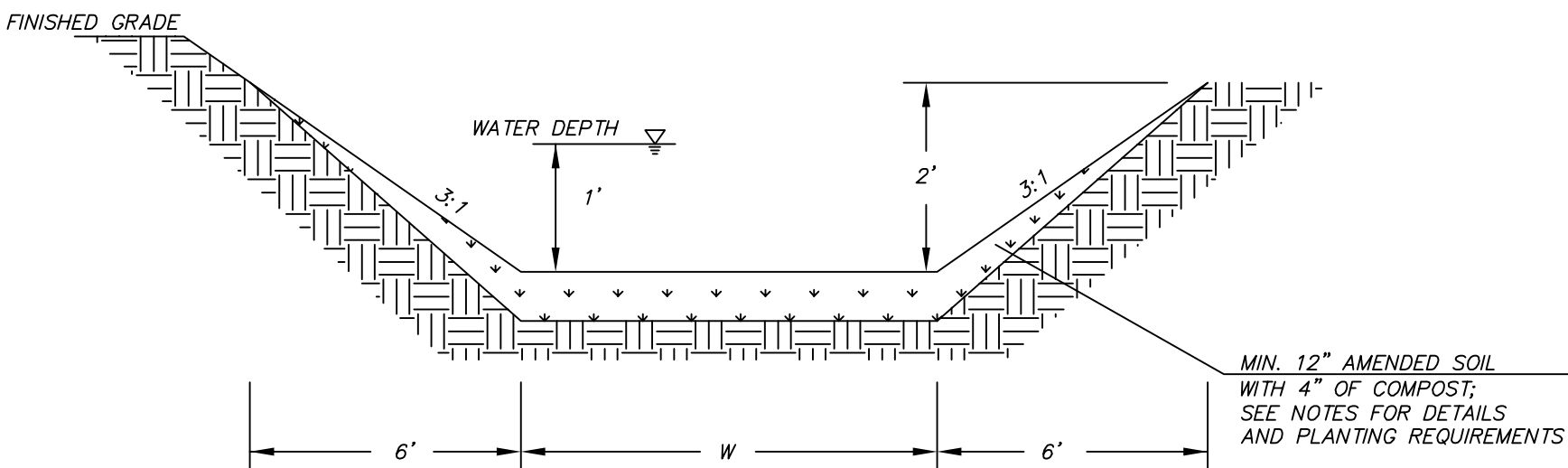
SECTION VIEW A-A (not to scale)

RAIN GARDEN DETAIL

RAIN GARDEN TABLE										
LOT	ROOF AREA (SF)	STORAGE VOLUME (CF)		RAIN GARDEN DIMENSIONS (FT)			TOP OF RAIN GARDEN	BOTTOM OF RAIN GARDEN	INLET ELEVATION	OVERFLOW YD RIM
		REQUIRED	PROVIDED	L	W	D				
24	1000	250	250	24	5	1	474.60	472.60	472.60	472.10
26	2600	650	660	88	4	1	467.50	465.50	465.50	465.00
27	2050	512.5	520	68	4	1	474.70	472.70	472.70	472.20
28	2800	700	720	96	4	1	476.75	474.75	474.75	475.25

NOTE:

ROOF DRAINS ON LOTS 24 AND 26-28 TO BE CONNECTED TO RAIN GARDENS. FOOTING DRAINS TO BE CONNECTED TO LOT STORM STUBS.



RAIN GARDEN CROSS SECTION

C.2.5.1 MINIMUM DESIGN REQUIREMENTS

All of the following requirements must be met in order for a rain garden to be applicable to a *target impervious surface* or *new pervious surface*:

1. A minimum water storage volume equivalent to 3 inches (0.25 feet) of runoff depth from the impervious surface area served is required. In other words, the volume in cubic feet shall equal 0.25 times the square footage of the impervious surface area served (see example calculation in Section C.2.5.2 below). For rain gardens serving *new pervious surface*, a minimum water storage volume equivalent to 0.5 inches (0.04 feet) of runoff depth is required.
2. The water storage area, containing the minimum required storage volume, shall be 12 inches deep at overflow and have side slopes no steeper than 3 horizontal to 1 vertical. The overflow point of the water storage area shall be at least 6 inches below any adjacent pavement area. The overflow point must be situated so that overflow does not cause erosion damage or unplanned inundation.
3. If a containment berm is used to form the water storage area, the berm must be at least 2 feet wide and 6 inches above the 12 inches of water depth. A catch basin or rock pad must be provided to release water when the pond's water level exceeds the 12 inches of water depth. The catch basin may discharge to the local drainage system or other acceptable discharge location via a 4-inch rigid pipe. The rock pad may be used with or without a constructed drainage system downstream. If a rock pad is used, it must be composed of crushed rock, 6-inches deep and 2 feet wide (perpendicular to flow) and must extend at least 4 feet or beyond the containment berm, whichever is greater. The rock pad must be situated so that overflow does not cause erosion damage or unplanned inundation.
4. Amended soil consisting of minimum of 4 inches of compost tilled into the upper 12 inches of soil or 12 inches of imported sand/compost blend having 8 to 13% organic material by dry weight is required in the rain garden. Tilling and amending to greater depth is desirable.
5. Water tolerant plants such as those in Table C.2.5.A shall be planted in the pond bottom. Plants native to Western Washington are preferred.
6. A minimum 5-foot setback shall be maintained between any part of a rain garden and any structure or property line.
7. Rain gardens are not allowed in critical area buffers or on slopes steeper than 20%. Rain gardens proposed on slopes steeper than 15% or within 50 feet of a *steep slope hazard area* or *landslide hazard area* must be approved by a *geotechnical engineer* or *engineering geologist* unless otherwise approved by the DDES staff geologist.
8. For sites with septic systems, rain gardens must be located downgradient of the primary and reserve drainfield areas. DDES permit review staff can waive this requirement if site topography clearly prohibits subsurface flows from intersecting the drainfield.
9. The rain garden must not create flooding or erosion impacts as determined by the DDES. If a rain garden is proposed near a *landslide hazard area*, *erosion hazard area*, *steep slope hazard area*, or a slope steeper than 15%, DDES may require evaluation and approval of the proposal by a *geotechnical engineer* or *engineering geologist*.

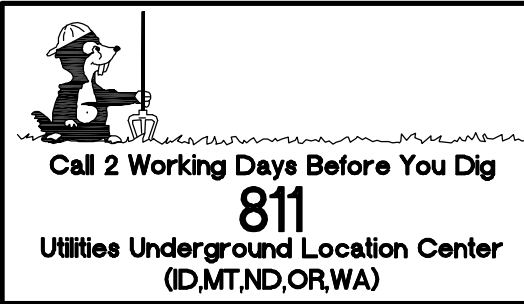
TABLE C.2.5.A WATER TOLERANT PLANTS

Common Name	Scientific Name	Spacing (on center)
Western manna grass	<i>Glyceria occidentalis</i>	seed
Velvet grass	<i>Holcus mollis</i>	seed
Shortawn foxtail	<i>Alopecurus aequalis</i>	seed
Water foxtail	<i>Alopecurus geniculatus</i>	seed
Spike rush	<i>Eleocharis spp.</i>	4 inches
Slough sedge	<i>Carex obnupta</i>	6 inches or seed
Sawbeak sedge	<i>Carex stipata</i>	6 inches
Sedge	<i>Carex spp.</i>	6 inches
Slender rush	<i>Juncus tenuis</i>	6 inches
Water parsley	<i>Oenanthe sarmentosa</i>	6 inches
Hardstem bulrush	<i>Scirpus acutus</i>	6 inches
Watercress	<i>Rorippa nasturtium-aquaticum</i>	12 inches
Small-fruited bulrush	<i>Scirpus microcarpus</i>	12 inches

THESE PLANS ARE RECORD DRAWINGS AND THE INFORMATION SHOWN ACCURATELY REFLECTS EXISTING FIELD CONDITIONS AS OF 11/06/19.

AS-BUILT

NO AS-BUILT INFORMATION ON THIS SHEET.

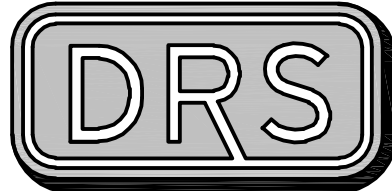


SUBDIVISION

City of Sammamish Approval
Examined and Approved per SMC 20.05
for SDP2017-00575
this _____ day of _____, 20____.

City Planner

Public Works Development Review Engineer



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH

RAIN GARDEN DETAILS
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147



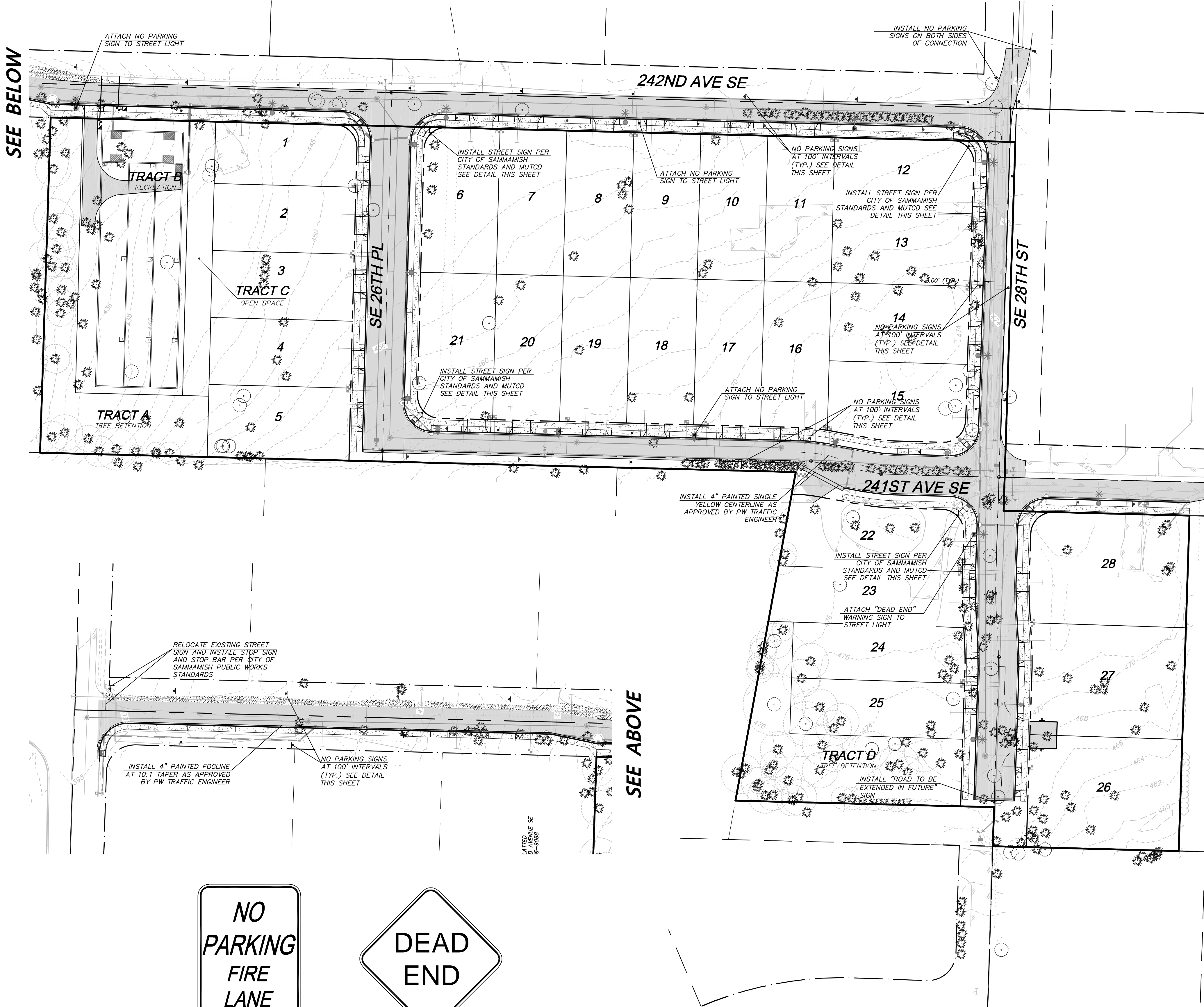
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DATE
06/13/17
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11/11/19
10/26/20

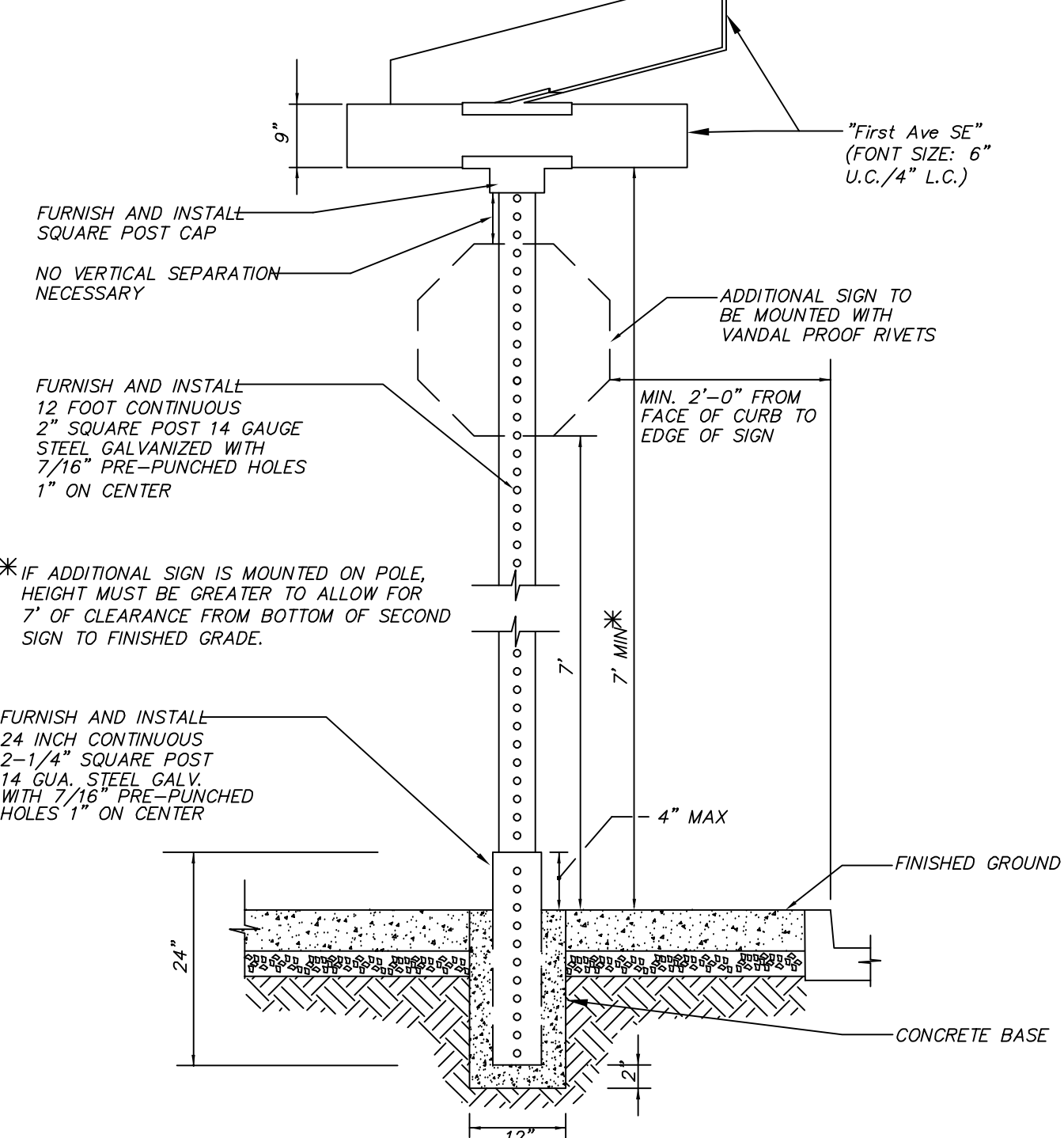
DRAFTED BY: CEN
DESIGNED BY: YLP
PROJECT ENGINEER: MAJ
DATE: 02.15.17
PROJECT NO.: 15065

DRAWING: C31
SHEET: 31 OF 31

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.
PENNY LANE SOUTH
SDP2017-00575

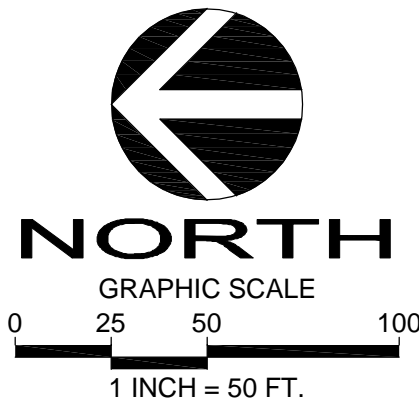


- NOTES:
1. ALL EXISTING SIGNS THAT ARE TO BE RELOCATED SHALL BE INSTALLED ON NEW POSTS AND HARDWARE.
 2. 2" TELESFIRE GALVANIZED POSTS
 3. 2 1/4" TELESFIRE GALVANIZED ANCHORS, 24" LONG
 4. SET ANCHORS 20" DEEP, WRAP ANCHORS AND SET IN CONCRETE. BOLTS TO BE 2" ABOVE FINISHED GRADE
 5. SIGNS TO BE V.I.P. (DIAMOND GRADE)
 6. SIGNS TO BE ATTACHED WITH VANDAL PROOF RIVETS
 7. D-3'S TO BE E.G. BACKGROUND DIAMOND GRADE LETTERING
 8. D-3'S TO BE MOUNTED WITH ALUMINUM CAPS AND CROSS BRACKETS
 9. WHITE LEGEND ON GREEN BACKGROUND



STREET SIGN INSTALLATION DETAIL

- NOTES
1. ALL STRIPING LAYOUT AND SIGNAGE SHALL BE APPROVED BY PW TRAFFIC ENGINEER 48 HOURS PRIOR TO INSTALLATION.
 2. INSTALL "NO PARKING - FIRE LANE" AT 100-FOOT INTERVALS WHERE INDICATED



AS-BUILT
NO AS-BUILT INFORMATION ON THIS SHEET.

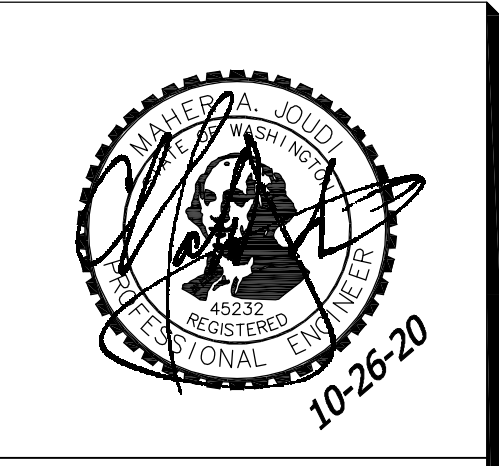
Call 2 Working Days Before You Dig
811
Utilities Underground Location Center
(D.M.T.N.D. OR WA)

SUBDIVISION	
City of Sammamish Approval Examined and Approved per SMC 20.05 for SDP2017-00575 this ____ day of _____, 20__.	
City Planner	
Public Works Development Review Engineer	

DRS
D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

PENNY LANE SOUTH
CHANNELIZATION AND SIGNAGE PLAN
24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC
9675 SE 36TH STREET, SUITE 105
MERCER ISLAND, WA 98040
(206) 588-1147

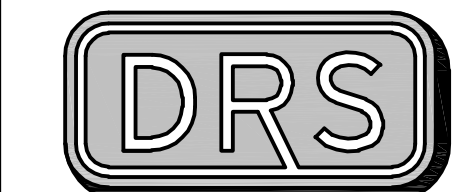


REVISION	DATE	BY	APP
CITY COMMENTS	06/13/17	MAJ	MAJ
CITY COMMENTS	07/12/17	MAJ	MAJ
AS-BUILT	11/11/19	MAJ	MAJ
AS-BUILT MYLARS	10/26/20	MAJ	MAJ

DRAFTED BY:	CEN
DESIGNED BY:	YLP
PROJECT ENGINEER:	MAJ
DATE:	02.15.17
PROJECT NO.:	15065

DRAWING:	CH1
SHEET:	1 OF 1

NE 1/4 SECTION 10, TOWNSHIP 24 N, RANGE 6 E, W.M.
PENNY LANE SOUTH
SDP2017-00575



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
820 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

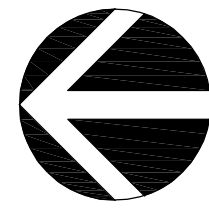
PENNY LANE SOUTH

FIRE HYDRANT PLAN

24106 & 24124 SE 28TH ST;
2525 & 2627 242ND AVE
SAMMAMISH, WA

WOOD CROWN, LLC

9675 SE 36TH STREET
SUITE 105
MERCER ISLAND, WA 98040

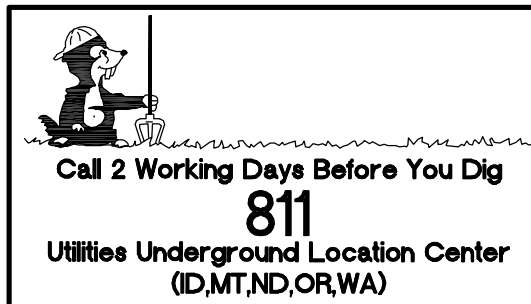


NORTH

GRAPHIC SCALE
0 25 50 100
1 INCH = 50 FT.

AS-BUILT

NO AS-BUILT INFORMATION ON THIS SHEET.



SUBDIVISION

City of Sammamish Approval
Examined and Approved per SMC 20.05
for SDP2017-00575
this ____ day of ____, 20__.

City Planner

Public Works Development Review Engineer

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DRAFTED BY: CEN

DESIGNED BY: YLP

PROJECT ENGINEER: MAJ

DATE: 02.13.17

PROJECT NO.: 15065

DRAWING: FH1

SHEET: 1 OF 1

AS-BUILT NO. 17-0326

SEE RIGHT

SEE LEFT

242ND AVE SE

SE 28TH ST

241ST AVE SE

SE 26TH PL

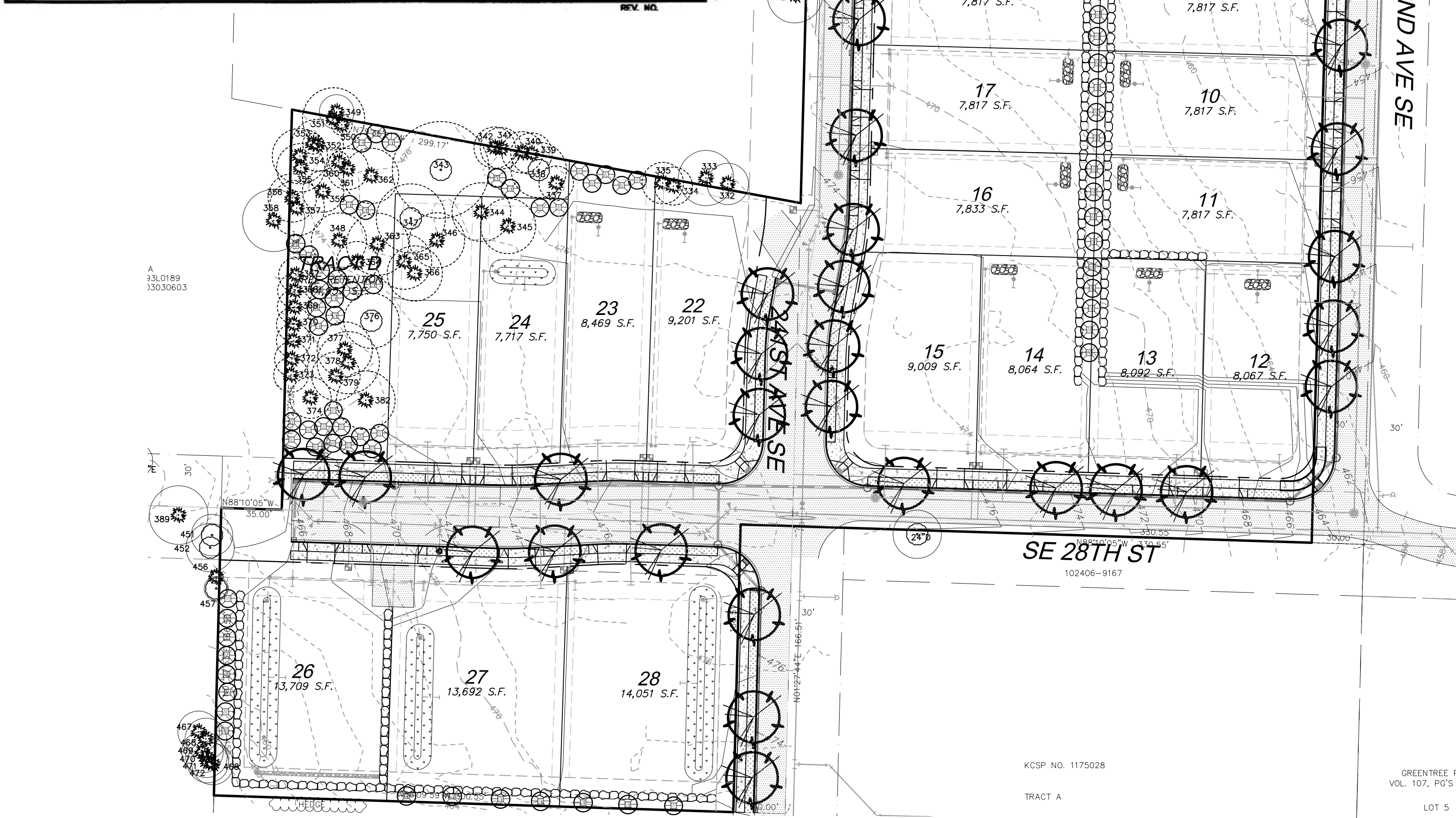
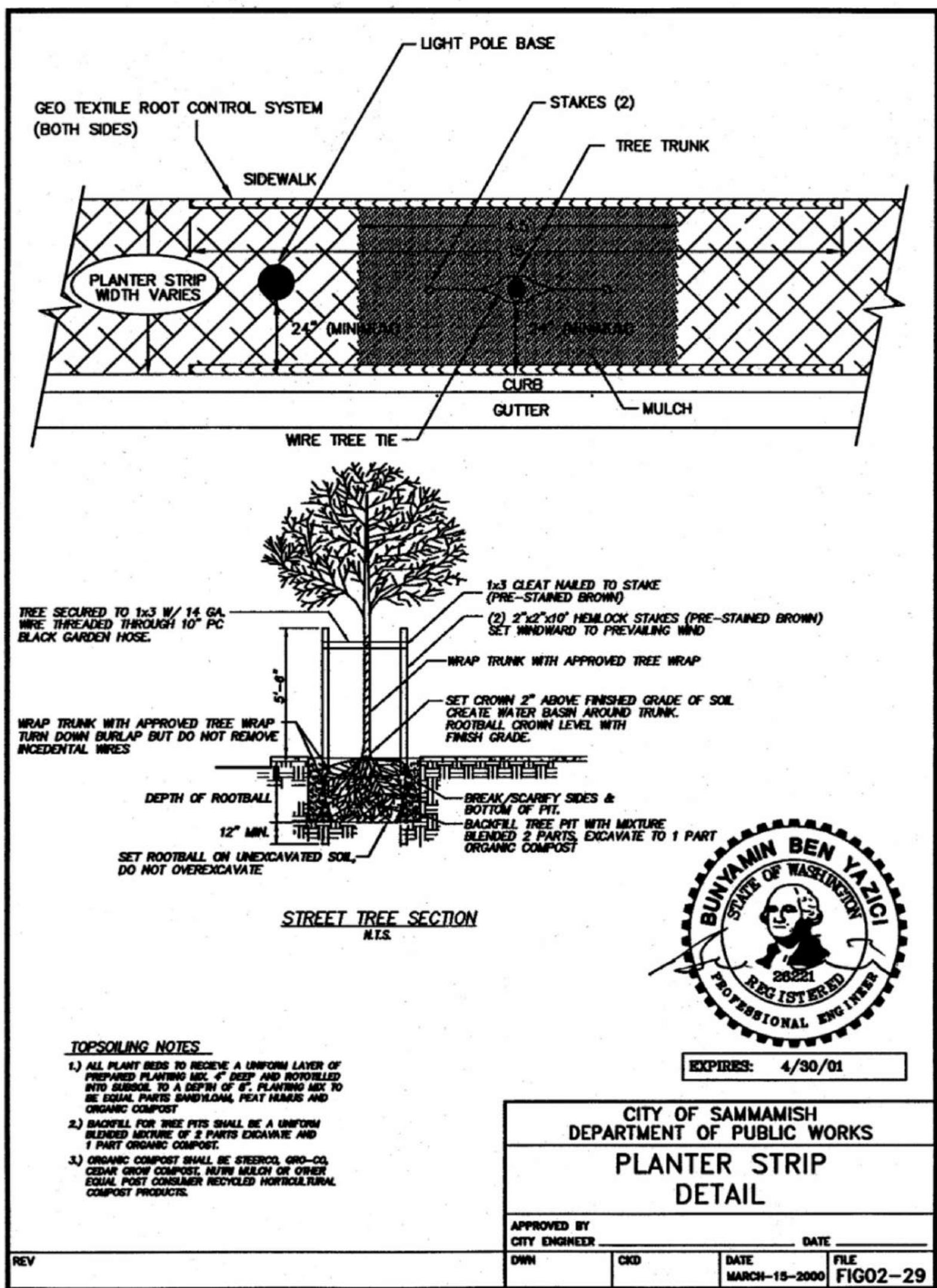
TRACT B
RECREATION

TRACT C
OPEN SPACE

TRACT A
TREE RETENTION

TRACT D
TREE RETENTION

HAMMERHEAD DETAIL



REPLACEMENT TREE MATRIX

229 REPLACEMENT TREES REQUIRED:
210 EVERGREEN TREES, AND
19 DECIDUOUS TREES

STREET TREES BELOW MINIMUM REQUIRED, PER 21A.37.280 (2) (b):
49 STREET TREES x 50% = 19 TREES
MAXIMUM 19 DECIDUOUS TREES ALLOWED

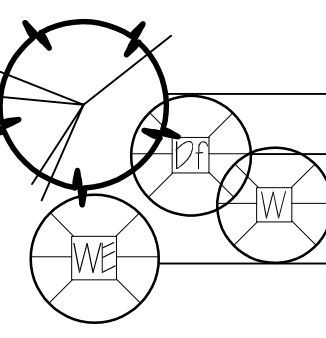
OTHER ON-SITE REPLACEMENT TREES, PER PER 21A.37.280 (2) (d)
210 TREES x 100% = 210 TREES

229 REPLACEMENT TREES PROVIDED

REPLACEMENT TREE PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
Acer rubrum 'Red Sunset'	Red Maple	2.5" cal*	49	Full and Matching, Plant 35' on-center
Pseudotsuga menziesii	Douglas Fir	8' ht min.	80	Full and Matching
Thuja plicata	Western Red Cedar	8' ht min.	92	Full and Matching
Thuja plicata 'Hogan'	Columnar Red Cedar	8' ht min.	38	Full and Matching

*Note: Caliper is measured 6" above finish grade



LANDSCAPE NOTES

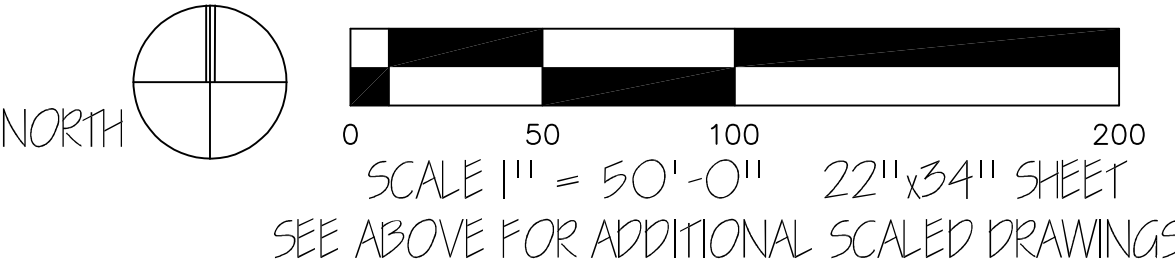
- CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL OTHER SITE IMPROVEMENTS AND CONDITIONS PRIOR TO STARTING LANDSCAPE WORK.
- CONTRACTOR SHALL USE CAUTION WHILE EXCAVATING TO AVOID DISTURBING ANY UTILITIES ENCOUNTERED. CONTRACTOR IS TO PROMPTLY ADVISE OWNER OF ANY DISTURBED UTILITIES. LOCATION SERVICE PHONE 1-800-424-5555
- CONTRACTOR SHALL MAINTAIN AND WATER ALL PLANT MATERIAL FOR 1 YEAR OR UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPUTING SPECIFIC QUANTITIES OF GROUND COVERS AND PLANT MATERIALS UTILIZING ON-CENTER SPACING FOR PLANTS AS STATED ON THE LANDSCAPE PLAN AND MINIMUM PLANTING DISTANCES AS SPECIFIED BELOW IN THESE NOTES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE QUANTITIES OF PLANTS THAT ARE REPRESENTED BY SYMBOLS ON THE DRAWINGS.
- SUBGRADE IS TO BE WITHIN 1/10" OF ONE FOOT AS PROVIDED BY OTHERS. ALL PLANTING AREAS TO BE CLEARED OF ALL CONSTRUCTION MATERIAL AND ROCKS AND STICKS LARGER THAN 2" DIAMETER.
- NEW BED AREAS, AS SHOWN ON THE PLANS, SHALL RECEIVE A MINIMUM OF 2" DEPTH ORGANIC MATERIAL CULTIVATED INTO THE TOP 6" OF SOIL.
SOIL SHALL HAVE AN ORGANIC CONTENT OF FIVE PERCENT OR MORE TO A DEPTH OF SIX INCHES AS SHOWN IN A SOIL SAMPLE ANALYSIS. THE SOIL ANALYSIS SHALL INCLUDE:
A. DETERMINATION OF SOIL TEXTURE, INDICATING PERCENTAGE OF ORGANIC MATTER,
B. AN APPROXIMATION OF SOIL INFILTRATION RATE, AND
C. MEASURE PH VALUE.
- ALL BEDS TO RECEIVE A MINIMUM OF 2" FINE FIR BARK OR SIMILAR APPROVED MULCH.
- ALL PLANT MATERIAL SHALL BE FERTILIZED WITH AGRO TRANSPLANT FERTILIZER 4-2-2 PER MANUFACTURER'S SPECIFICATIONS.
- ALL PLANT MATERIAL SHALL CONFORM TO ANLA STANDARDS FOR NURSERY STOCK, LATEST EDITION. ANY REPLACEMENTS MADE AT ONCE.
A. GENERAL: ALL PLANT MATERIAL FURNISHED SHALL BE HEALTHY REPRESENTATIVES, TYPICAL OF THEIR SPECIES OF VARIETY AND SHALL HAVE A NORMAL GROWTH HABIT. THEY SHALL BE FULL, WELL BRANCHED, WELL PROPORTIONED, AND HAVE A VIGOROUS, WELL DEVELOPED ROOT SYSTEM. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
B. TREES: SHRUBS, AND GROUND COVER: QUANTITIES, SPECIES, AND VARIETIES, SIZES AND CONDITIONS AS SHOWN ON THE PLANTING PLAN. PLANTS TO BE HEALTHY, VIGOROUS, WELL FOLIATED WHEN IN LEAF. FREE OF DISEASE, INJURY, INSECTS, DECAY, HARMFUL DEFECTS, AND ALL WEEDS. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT OR OWNER.
- LAWN IS PROPOSED FOR ALL LANDSCAPE STRIPS.

SOIL AMENDMENT NOTE

AREAS THAT HAVE BEEN CLEARED AND GRADED SHALL HAVE THE SOIL MOISTURE HOLDING CAPACITY RESTORED TO THAT OF THE ORIGINAL UNDISTURBED SOIL NATIVE TO THE SITE TO THE MAXIMUM EXTENT PRACTICABLE. THE SOIL IN ANY AREA THAT HAS BEEN COMPACTED OR THAT HAS SOME OR ALL OF THE DUFF LAYER OR UNDERLYING TOPSOIL DISTURBED SHALL BE AMENDED TO MITIGATE FOR LOST MOISTURE-HOLDING CAPACITY. THE AMENDMENT SHALL TAKE PLACE BETWEEN MAY 1 AND OCTOBER 1. THE TOPSOIL LAYER SHALL BE A MINIMUM OF EIGHT INCHES THICK, UNLESS THE APPLICANT DEMONSTRATES THAT A DIFFERENT THICKNESS WILL PROVIDE CONDITIONS EQUIVALENT TO THE SOIL MOISTURE HOLDING CAPACITY NATIVE TO THE SITE. THE TOPSOIL LAYER SHALL HAVE AN ORGANIC MATTER CONTENT OF BETWEEN FIVE TO TEN PERCENT DRY WEIGHT AND A PH SUITABLE FOR THE LANDSCAPE PLANTS. WHEN FEASIBLE, SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST FOUR INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS. COMPOST USED TO ACHIEVE THE REQUIRED SOIL ORGANIC MATTER CONTENT MUST MEET THE DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173-350-220.

THIS REQUIREMENT DOES NOT APPLY TO AREAS OF THE SITE COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS A STRUCTURAL FILL OR SLOPE.

AS-BUILT



REVISONS

NO.	DATE	DESCRIPTION
1	06.12.16	REVISED SITE PLAN
2	02.11.17	REVISED SITE PLAN
3	06.12.17	REVISED PER COMMENTS
4	09.29.18	AS-BUILT ISSUE

STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

JEFF M. VARLEY
CERTIFICATE No. 774

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landscape architect

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www.varleylandscape.com

PNW HOLDINGS, LLC

PENNY LANE SOUTH

AS-BUILT LANDSCAPE SET -

STREET TREE and REPLACEMENT TREE PLAN

JOB NUMBER:
DRAWING NAME:
DESIGNER: JMV
DRAFTING BY: JMV
DATE: 10.24.15
SCALE: AS SHOWN
JURISDICTION: SAMMAMISH

L-1

SHEET 1 of 2

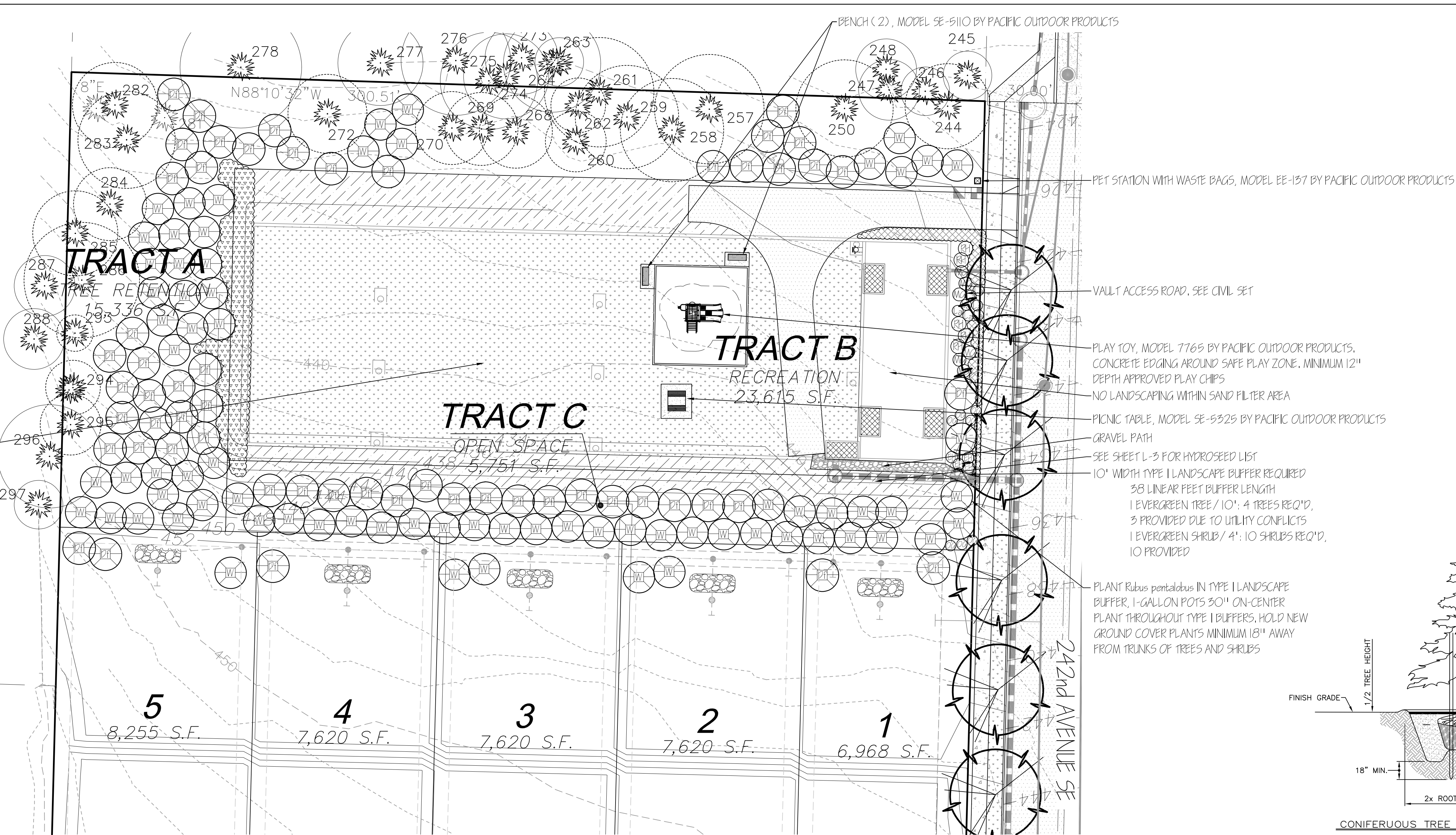
AS-BUILT NO. 17-0327

KCSP NO. 1175028

TRACT A

GREENTREE F
VOL. 107, PG'S

LOT 5



TRACTS B and C - LANDSCAPE PLAN

SCALE 1"=20'



Common Name	Genus & Species	Color	Growth	%
Sheep Fescue	<i>Festuca ovina</i>	n/a	P	60
Blue Wildrye	<i>Elymus glaucus</i>	n/a	P	12
Mountain Brome	<i>Bromus marginatus</i>	n/a	P	15
Tufted Hairgrass	<i>Deschampsia caespitosa</i>	n/a	P	5
Blue Flax	<i>Linum perenne lewisii</i>	Blue	P	4
Wallflower	<i>Cheiranthus cheiri</i>	Orange	A	1
Western Yarrow	<i>Achillea millefolium</i>	White	P	2
Black-eyed Susan	<i>Rudbeckia hirta</i>	Yellow/Black	P	0.5
Lupine	<i>Lupinus perennis</i>	Blue/Purple	P	0.5

DESCRIPTION

Western Native is a unique blend of native grasses and wildflowers formulated to beautify and naturalize your landscape by providing seasonal color, enhanced wildlife habitat, and natural soil stabilization. **Western Native** will provide a low maintenance, relatively inexpensive, long lasting, and ever-changing addition to any landscape or environment.

Western Native is made up of 92% grasses and 8% wildflowers native to Western Washington, and is suited to any planting site west of the Cascade Mountains less than 3000 ft. elevation.

ESTABLISHMENT & MANAGEMENT

Seeding rate: 2.25 lbs. per 1000 sq. ft.
100 lbs. per acre

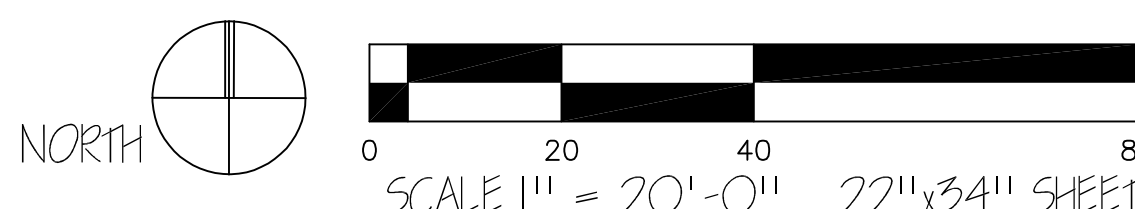
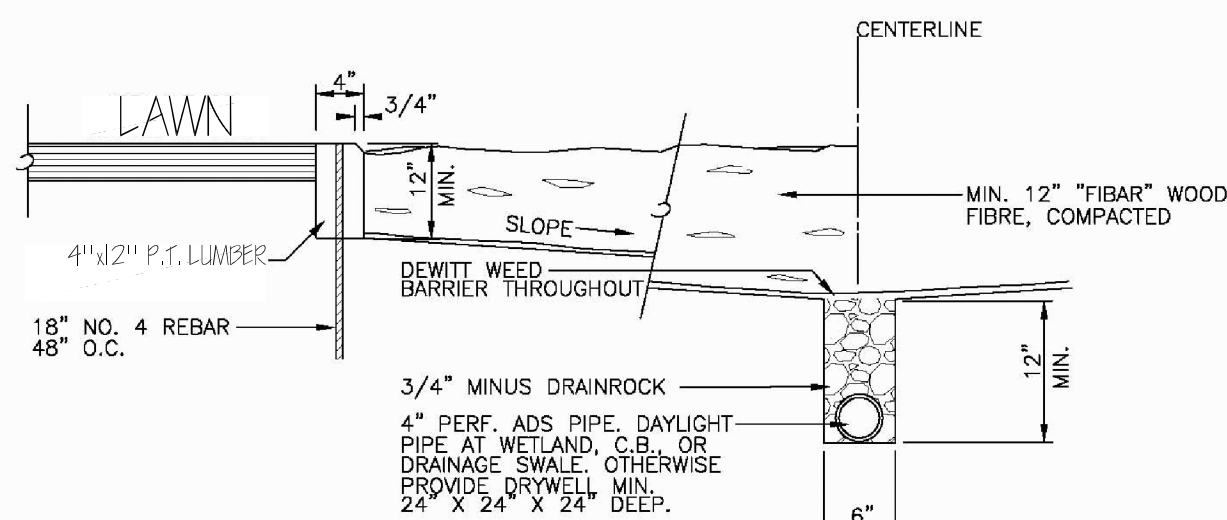
PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
SHRUBS and GROUND COVER				
<i>Lavandula</i> sp. 'Hidcote'	Lavender	1-gallon	7	Full and Matching
<i>Rhododendron</i>	Rhodie	18" ht	5	Full and Matching
<i>Miscanthus sinensis</i>	Maiden Grass	18" ht	6	Full and Matching
<i>Vaccinium ovatum</i>	Evergreen Huckleberry	min. 24" ht	4	Full and Matching
<i>Mahonia aquifolium</i>	Tall Oregon Grape	min. 24" ht	10	Full and Matching

Erica sp. 'Med. White' Heather 1 gallon As req'd Plant 24" on-center

LAWN

2"-3" depth arborist wood chip mulch



REVISIONS

NO.	DATE	DESCRIPTION
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STATE OF WASHINGTON
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www.varleylandscape.com

PNW HOLDINGS, LLC

PENNY LANE SOUTH
AS-BUILT LANDSCAPE SET -
LANDSCAPE PLAN - TRACTS B and C

JOB NUMBER:
DRAWING NAME:
DESIGNER: JMW
DRAFTING BY: JMW
DATE: 10.24.15
SCALE: AS SHOWN
JURISDICTION: SAMMAMISH

L-2
SHEET 2 of 2

AS-BUILT NO. 17-0328



DESIGN NOTES:
REFERENCE: 1. DR. Strong Consulting Engineers, Inc., Preliminary Grading Plan, undated
2. Earth Solutions NW, LLC, Geotechnical Engineering Study, Project No. ES-4006, dated September 17, 2015

The following assumptions were used:
Internal angle of friction for reinforced soil = 32 degrees (design only)
Unit weight of reinforced soil = 125 pcf
Maximum wall height = 12 feet
Batter of wall = Vertical or 1H : 6V
Surcharges (Where Applicable) = 2500 plf Footing Strip Load

Rockery construction is a craft. The skill and experience of the builder will largely dictate the success of the construction.

A rockery is a protective system with respect to the weathering and erosion process on an exposed soil face.

Maximum inclination of the slopes above and in front of rockeries should be 2 : 1 (horizontal : vertical).

Minimum thickness of rock filter layer = 18 inches.

Rockeries greater than 6 feet in height should be installed under the observation of the Geotechnical Engineer.

The long dimension of the rocks should extend back towards the cut or fill face to provide maximum stability.

Rocks should be placed to avoid continuous joint planes in vertical or lateral directions. Each rock should bear on two or more rocks below it, with good flat-to-flat contact.

Rock designations and approximate weights are provided below.

For Fill Rockeries, it is imperative that Structural Fill compaction extend all the way to the back of the Rockery and Filter Drain Rock Zone. Reduced lift thickness and light compaction equipment may be required to fully achieve the required compaction.

Size	Approximate Weight - lbs.	Approximate Diameter
1 Man	50 - 200	12" - 18"
2 Man	200 - 700	18" - 28"
3 Man	700 - 2000	28" - 36"
4 Man	2000 - 4000	36" - 48"
5 Man	4000 - 6000	48" - 54"
6 Man	6000 - 8000	54" - 60"

GEOGRID SOIL REINFORCEMENT

- A. Geosynthetic reinforcement shall consist of geogrids manufactured specifically for soil reinforcement applications and shall be manufactured from high tenacity polyester yarn or high density polyethylene. Polyester geogrid shall be knitted from high tenacity polyester filament yarn with a molecular weight exceeding 25,000 Meg/m and a carboxyl end group values less than 300. Polyester geogrid shall be coated with an impregnated PVC coating that resists peeling, cracking and stripping.
- B. Geogrid shall consist of Miragrid (See Geogrid Schedule).
- C. Manufacturing Quality Control:
The geogrid manufacturer shall have a manufacturing quality control program that includes QC testing by an independent laboratory.
The QC testing shall include:
...Tensile Strength Testing
...Melt Flow Index (HDPE)
...Molecular Weight (Polyester)

STRUCTURAL FILL

- A. Structural Fill shall consist of granular well graded material with a fines content of less than 25 percent (percent passing the #200 sieve based on the minus three-quarters inch fraction). Some rockery applications may require the use of "select" free draining Structural Fill Material. Structural Fill Material shall be approved and tested by the Geotechnical Engineer.

STRUCTURAL GEOGRID INSTALLATION

- A. Geogrid shall be oriented with the highest strength axis perpendicular to the rockery alignment.
- B. Geogrid Reinforcement shall be placed at the strengths, lengths and elevations shown on the construction design drawings or as directed by the Engineer.
- C. The geogrid shall be laid horizontally on compacted backfill and extend to the back of the rockery. The geogrid shall be pulled taut, and anchored prior to backfill placement on the geogrid.
- D. Geogrid Reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps between adjacent pieces of geogrids are not permitted.

REINFORCED BACKFILL PLACEMENT

- A. Reinforced Backfill shall be placed, spread and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
- B. Reinforced Backfill shall be placed and compacted in lifts not to exceed 6 inches where hand compaction is used, 12 inches where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.
- C. Reinforced Backfill shall be compacted to 95% of the maximum density as determined by ASTM D-1557-91. The moisture content of the backfill material prior to and during compaction shall be at or near the optimum moisture content.
- D. The required compaction shall extend all the way to the back of the Rockery and Filter Drain Rock Zone.

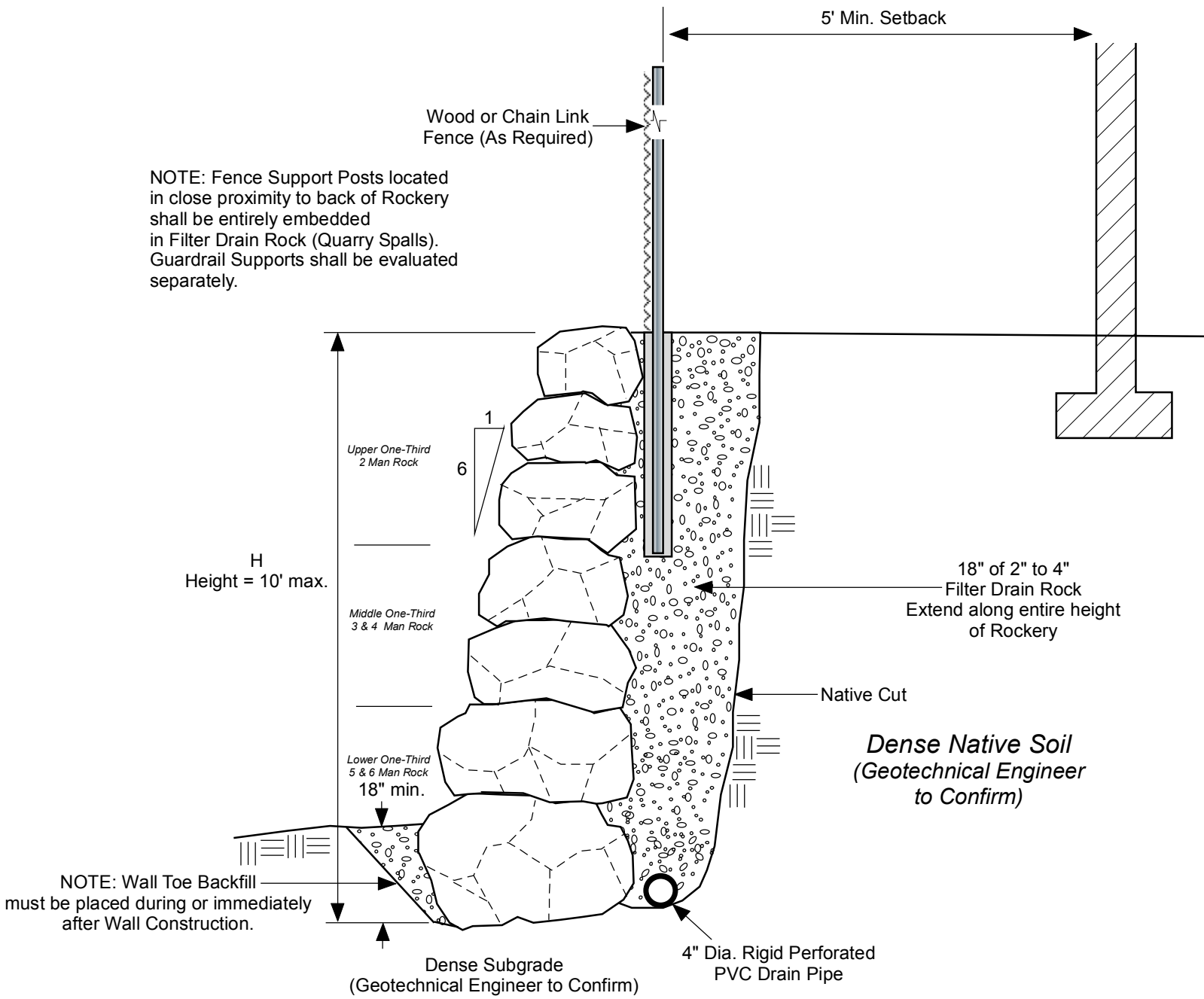
- E. Only lightweight hand-operated equipemnt shall be allowed within 3 feet of the back of the rockery.
- F. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.
- G. Rubber tired equipment may pass over geogrid reinforcement at slow speed, less than 10 MPH. Sudden braking and sharp turning shall be avoided.
- H. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the rockery to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

NATIVE CUT ROCKERY

- A. The Geotechnical Engineer shall observe cuts for the rockery. Additional flattening of cuts may be recommended by the Geotechnical Engineer depending on the soil and groundwater conditions observed. Where Native Cuts do not expose competent Native Soils, additional excavation and the addition of reinforcement and Compacted Structural Fill may be necessary.

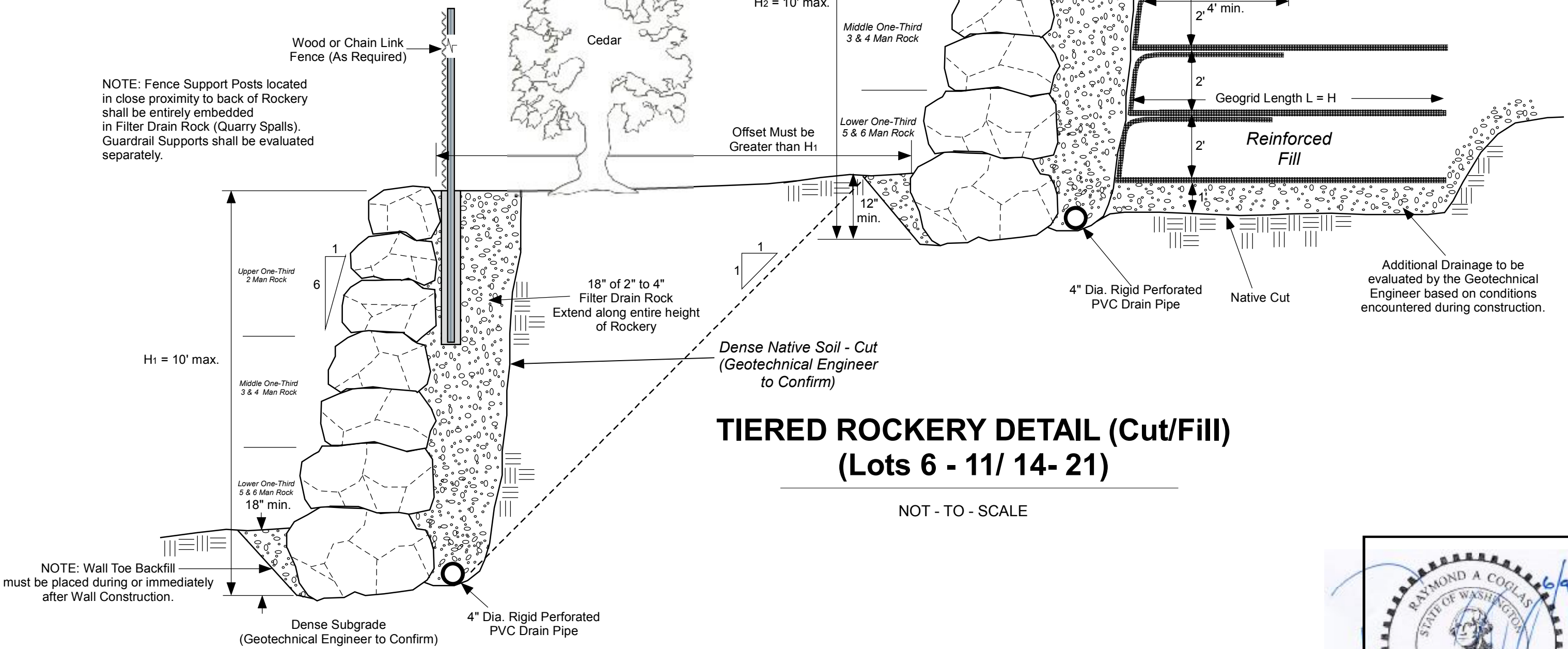
FIELD QUALITY CONTROL

- A. The rockery construction shall be observed by the Geotechnical Engineer on a periodic or full-time basis as appropriate. Testing of the compacted backfill shall be performed by the Geotechnical Engineer.
- B. Quality assurance shall include foundation soil inspection, soil and backfill testing, verification of design parameters and observation of construction for general compliance with design drawings and specifications.



**NATIVE CUT ROCKERY
DETAIL**

NOT - TO - SCALE



**TIERED ROCKERY DETAIL (Cut/Fill)
(Lots 6 - 11/ 14- 21)**

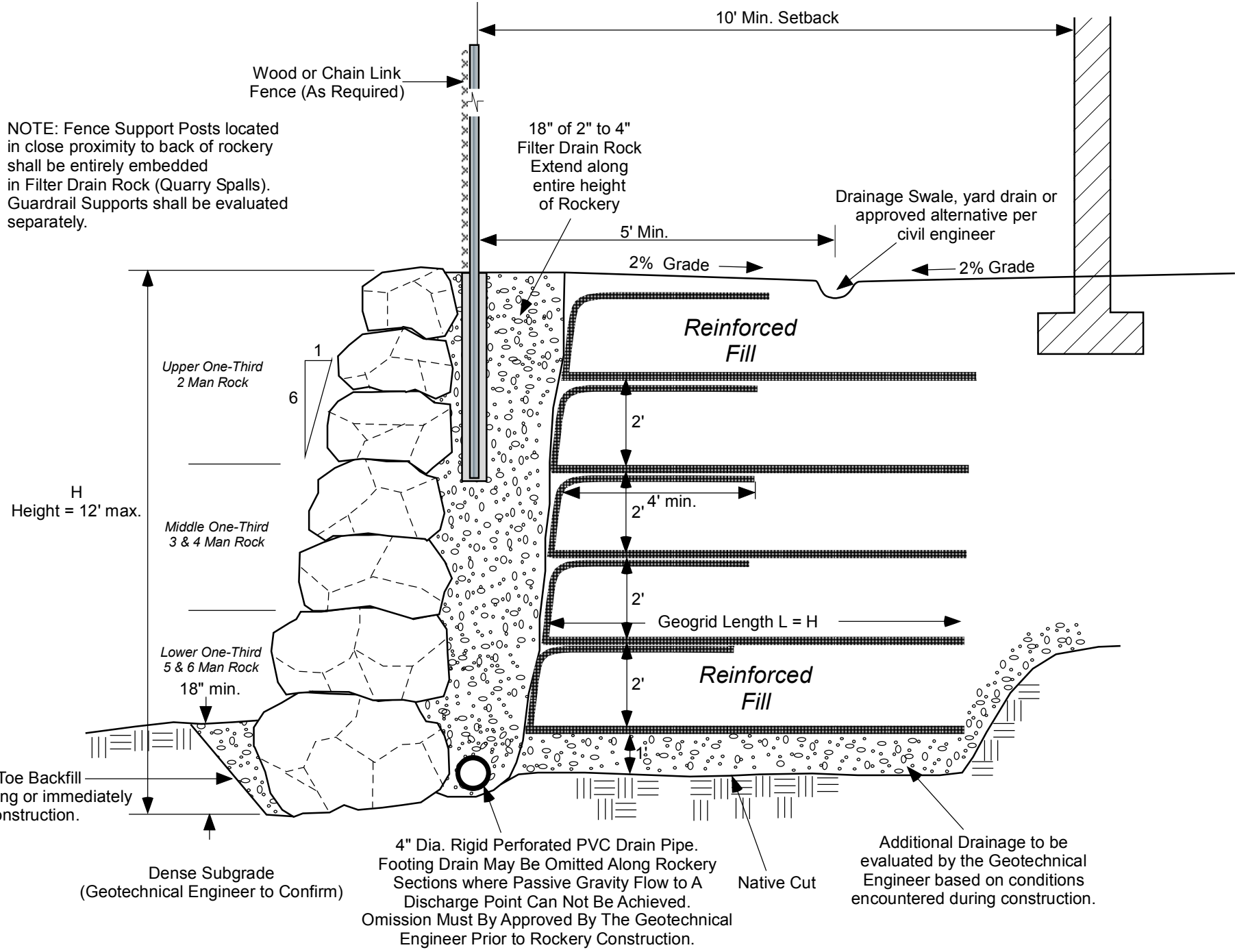
NOT - TO - SCALE

GEOGRID SCHEDULE							
Wall Height (feet)	Geogrid Length (feet)	Layers					
		1	2	3	4	5	6
6.00	6.00	A	A	A	-	-	-
8.00	8.00	A	A	A	A	-	-
10.00	10.00	A	A	A	A	A	-
12.00	12.00	A	A	A	A	A	A

GEOGRID: A = Miragrid 5XT (or approved alternative per Geotechnical Engineer)

**ENGINEERED
FILL ROCKERY DETAIL
(Lots 26 - 28 only)**

NOT - TO - SCALE



Rockery Design
PENNY LANE SOUTH
Sammamish, Washington

Earth Solutions NW
Geotechnical Engineering, Construction Monitoring
and Environmental Sciences



Revisions	Date	Revised By	Checked By
Revisions	06/09/2017		

Proj. No.	4006.01
Date	02/17/2017
Dwn. By	MRS
Checked By	BJP

Sheet No.

R1



AS-BUILT